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HISTORY
OF THE
BERWICKSHIRE
NATURALISTS' CLUB

INSTITUTED SEPTEMBER 22, 1831



"MARE ET TELLUS, ET, QUOD TEGIT OMNIA, CÆLUM"

VOL. XXXI. 1947, 1948, 1949

EDINBURGH
PRINTED FOR THE CLUB
BY NEILL AND CO. LTD., 212 CAUSEWAYSIDE
1950



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PROCEEDINGS
OF THE
BERWICKSHIRE NATURALISTS' CLUB

THE STUDY OF WEATHER WITH SPECIAL
REFERENCE TO COLD WINTERS.

*Address delivered to the Berwickshire Naturalists' Club
at Berwick, 1st October 1947, by Rev. A. E.
SWINTON, M.A., F.R.Met.S.*

THIS is my swan song! I feel quite sad that my term of office has come to an end. In one respect I am unique among the Presidents of the Club in that I have been President for eight years, although six of them were years of suspended animation. I appreciate the kindness of the Council which has allowed me to continue as President for a year of full activity, as well as the post-war year of partial return to life. I felt tremendously honoured to receive an invitation to become President of the oldest Field Club in Britain, older by one month than the British Association; and to be numbered with the distinguished men who have held the office. As we are meeting in Berwick, I might mention another invitation which came almost at the same time. To my utter surprise, the Bishop of Newcastle offered me the Vicarage of Berwick and the Rural Deanery of Norham. All who live in Berwick will be glad that I declined the offer, or you would not have had Mr Hicks as your Vicar, nor would the Club have gained him as a member.

Our motto defines the province of the Club as "Earth
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and sea and sky which covers all.” My chief work has been in the last section—in meteorology. For thirty-two years I have prepared a table of meteorological observations for the *History*, and since 1929, when Mr Craw handed that task over to me, a table of rainfall as well. My first connection with meteorology was when as a small boy I poured a jam-jar of water into my father’s rain-gauge. If that counts, then I have been a meteorologist for fifty years! So I propose to take as my subject “The Study of Weather with Special Reference to Cold Winters”; the latter being a very topical subject this year. The Rev. John Bigge, Vicar of Stamfordham, in his Presidential Address for 1875, urged the Club to do more for meteorology. He suggested that a committee should draw up a code of rules for observers. As far as I know, this proposal was not carried out, but members of the Club have at one time or another done a good deal of meteorological work. In Volume IX of the *History* Dr Hardy and Dr Stuart have collected a great amount of information about the winters from 1878 to 1881, and especially about the destruction of vegetation. Several of our members have kept rainfall records. Our Secretary has just set up a climatological station at his home.

There are two directions in which members can help the study of meteorology besides taking climatological observations. The Royal Meteorological Society needs more phenological observers for its annual survey of the dates of appearance of migrant birds, insects and flowers. This needs naturalists who can recognise the few species named. The Survey of Thunderstorms wants records of thunderstorms and thunderstorm damage. Application to Mr S. Morris Bower, Langley Terrace, Oakes, Huddersfield, will elicit details of what is required. Meteorology owes as much as, perhaps more than, any science to voluntary work. The work of The British Rainfall Organisation was a wonderful

achievement, built up on a voluntary basis by the devoted service of J. G. Symons and his successor, Dr H. R. Mill. Year by year the blue volumes of *British Rainfall* appeared, giving an increasing number of rainfall records, which in 1914 reached a total of 5453, and discussing their meaning in relation to averages, seasons, time, etc. Until 1919 this work was carried on without any Government assistance. When the Air Ministry was formed, it took over the Meteorological Office and The British Rainfall Organisation. But the dead hand of Government is apparent in the fact that *British Rainfall* was published later in peace-time under the Meteorological Office, with all its resources, than during the First World War under the Organisation with its small and depleted staff. In the Second World War it was not published at all; and we are still waiting after two years of so-called peace for the records from 1940 onwards to be given to the scientific world. It is really monstrous! Paper shortage is no real excuse; we could have done without a lot of other Government publications, not to mention forms!

The study of weather brings much enjoyment. In the first place, it is a subject of universal interest. Everybody talks about it. Unlike some sciences, meteorology is a definite asset in conversation. One must, however, be prepared to encounter some scepticism: as, for instance, when one states that at Swinton the highest temperature occurred not on one of those baking days in August, but on 29th May. One also finds that one's own impressions of the wetness or dryness, heat or cold, of a month or a season are quite wrong when one begins to add up the figures in the meteorological register. The interest of one's observations is of course increased when one has a long record for comparison. (I have now got a record at Swinton of nearly thirty-five years for rainfall and temperature.) Then one can see what figures really are remarkable. In 1940 I got a run of extremes.

January had the lowest mean temperature, 29.0° , June the highest, 59.7° . June also had the greatest amount of sunshine, 260 hours. July was the wettest month of any year, with 7.15 inches. October was the most sunless October, with only 44 hours.

Now let me turn to study some cold winters, beginning with the last. In some respects it was probably the worst which many of us can remember. In one respect it was unique, in that we had to contend not only with Jack Frost, but with Emmanuel Shinwell. Lack of fuel intensified our sufferings tenfold. We may, however, be thankful that it was practically February before the cold began. Here let us consider some of the factors which make for extreme cold. One is the small power of the sun near the winter solstice and the long nights, which result in small gain and great loss of heat by radiation. When the ground is covered with snow, it reflects back most of the heat received from the sun which otherwise would be absorbed by the ground, raising its temperature. So, once the ground is covered with snow, conditions favour more snow. The intensified cold makes it likely that further precipitation will take the form of snow. So, if the ground is covered with snow in early winter, things may easily go from bad to worse. The end of the snow will come in one of two ways, by a strong, warm wind from the Atlantic, or by the warmer sunshine of spring which imposes a definite limit on snow cover in these islands. Fortunately we generally get some Atlantic air before intense cold has lasted very long. In 1945 an appalling January was succeeded by a mild February. This year, however, at Swinton House, frost occurred in the screen on fifty consecutive nights and snow lay for fifty-six days. In 1942, snow lay for fifty-five days, but not so deep, and it almost disappeared from some of the surrounding country. February 1947 was the most severe since my observations began in 1914. It was the only February

with frost in the screen every day. Although the mean minimum was the lowest I have recorded, viz. 25, the night temperatures were not very remarkable, the lowest being 10. The persistent cold in the daytime was most trying. The mean minimum was 33.1, only one degree above freezing. There was no sunshine in the first fifteen days of the month, which was most depressing, but prevented the nights from being too cold. The appearance of drifting ice in the North Sea seems to have been almost unique. The coldest day of the winter was 4th March, when the thermometer fell to -4 . If anyone had told me that the temperature might fall to zero in March I should have scorned the idea, but I am wiser now. Has a zero temperature been recorded in Berwickshire in March before? I doubt it! The mean minimum of the first nine days in March was 11.3, yet the warm March sun mitigated the cold. One morning I sat in a room facing south without a fire and without desiring one. I have only twice had temperatures below zero, -7 on 5th January and -3 on 6th January 1941. The lowest temperature reported by the Meteorological Office for that cold spell was -6 at West Linton. Cowdenknowes had -8 , so Berwickshire seems to have won first prize that winter. Marchmont had a minimum of only 11 and Duns Castle of 10. Last March Braemar got it with -6 , a record for March. While we are on the subject, I might say a word about zero temperatures in Britain. You have probably heard that the lowest temperature recorded, -23 , was at Blackadder on 4th December 1879. This, however, was taken with an exposed thermometer two feet above ground. The lowest known screen temperature was -16 at Kelso on the same night, and -17 at Braemar in 1895. In November 1919 Braemar had -10 , West Linton -6 and Perth -7 . My minimum was only 10, Cowdenknowes had 2. In February 1929 three English stations, Ross on Wye, Usk and Houghall, had -1 .

There was a remarkable resemblance between the winters of 1942 and 1947. In both there were several snowstorms, culminating in the worst of the series just when we hoped the snow was getting over. These final blizzards both began on a Wednesday night, and there was much drifting, which blocked many roads. But whereas in 1942 most roads round Swinton were opened at the week-end, or soon after, in 1947 some main roads were not fit for traffic until the Thursday of the next week, and some side roads not until about a week later. Swinton was cut off from the outside world for several days. I happened to have gone to Edinburgh for a Church Board on the Wednesday, or I should not have been able to take my Sunday services at Coldstream. I got a train from Edinburgh to Kelso on the Saturday. In it was a man who was trying to get from London to Coldstream. He had spent a night at Berwick, and the only way he could get to Coldstream was by taking the train to Edinburgh and thence to Kelso. At Kelso I found that no trains were running to Coldstream, and there were no buses owing to a drift at Home Bank: so I started to walk, and after two miles got picked up by a passing car. A thaw began with some heavy rain on the Sunday; it was slow. Perhaps that was just as well, for we did not have flooding. In March 1942 the thaw was earlier and quicker: the thermometer twice rose to 63 and exceeded 50 on twelve days. In March 1947 it only rose to 53 on the single day when it touched 50. In my experience our worst snowstorms have been in March. Those of you who are connected with the Women's Rural Institutes may remember the storm of March 1937, when the rally at Lauder had to be put off. March 1937 was the coldest since 1919, with a mean temperature of 35·4. The mean of March 1947 was 32·8, the mean maximum 39·8, and the mean minimum 25·8. In March 1937 snow fell and lay between the 5th and the 18th; the lowest temperature

was 15 and there was no other reading below 20. In March 1947 there were eleven.

Another March snowstorm, which those who are old enough will remember, occurred in 1915. It also began on a Wednesday night. Why is Thursday a bad day for drifts in March? In this case, however, it followed some perfect spring days from 12th–15th. We had a maximum of 64 on the 14th. It turned chilly in the afternoon of the 16th. The 17th had a maximum of 38 with some sleet and snow. The following morning a blizzard was raging and many roads were blocked. But the day after we had nine hours of sunshine, and the snow had gone by the 22nd, except for big drifts. There were only three nights with frost, and not more than six degrees of it, during the period of snow. (*N.B.*—These temperatures were taken with a Six thermometer, not in a screen). In 1917 an appalling winter lasted on into April. March had very cold winds, but a good deal of sun. There was snow, but not much. April was a dreadful month. Marchmont recorded snow lying on fifteen days, a minimum of 14, and seventeen frost days. I shall never forget coming to Swinton House for three days' holiday on the 13th. We had two snowstorms, though not severe ones: there were no flowers in the garden except some *chionodoxas*.

I have done some research in back numbers of the Club's *History* to find out about winters of the past. Dr Charles Stuart described a typical March blizzard in 1886 after a cold January and February. Blocked roads were worse than they had been for forty years. Everyone will remember the three consecutive hard winters which we had at the beginning of the war, the last three war winters being comparatively mild, except January 1945. February 1941 was remarkable for one of our deepest snowfalls, apart from drifting, which fortunately did not occur. We measured eighteen and a half inches one day. Rain and snow for the month

amounted to 4.04 inches, but the snow did not lie all the month, and a rapid thaw began on the last day. March was cold, but there was little snow. The first two months of 1941 were very cold; snow lay for a good deal of the time, but not continuously. It is remarkable that while in the forty years 1898 to 1939 there were only two winters of exceptional severity, during 1940-47 there have been four (Manley, *Weather*, ii, p. 272).

There have, however, been worse winters in the past. In Volume I of our *History* P. J. Selby comments on the severe winter of 1838, when frost began on 6th January after a winter so far mild. Kelso had a minimum of three and Mellerstain two on 31st January. A slow thaw set in in March and the vast accumulations of snow began to melt. In his Anniversary Address of 1861 D. Milne Home mentioned that in some higher places temperatures two or three degrees below zero were recorded, and in the Tweed Valley seven to eight. At Milne Graden the Tweed was frozen nine to ten inches thick and did not break up for three weeks.

A series of frightful winters began in 1878, during which the destruction of trees and shrubs was phenomenal—even oaks were killed. In Volume IX of our *History* Dr Hardy collected much information about these winters, including details of trees killed. Rabbits did a lot of damage, just as they did this year. A general idea of the winter of 1878-79 is given by a statement of the Minister of Selkirk that the first snow fell on 20th October, and the last on 9th May. There were six months of uniformly cold weather. At Paxton snow lay deep for nearly nine weeks in December-February. The Tweed was frozen three times, so that men could walk over it. The only Berwickshire temperature below zero seems to have been -2 at Hirsell. At Springwood, Kelso, the mean temperature for December-February was 29 (with a minimum of -3 on 17th December), or less than the mean temperature of February 1947

(29·5) at Swinton. The summer of 1879 was a poor one, and the damaged trees did not recuperate sufficiently to withstand the shorter but unprecedented cold of the next winter. We were fortunate this year in having a record warm August to balance a record cold February. By the way, it is curious that although I had a maximum of 70 or over on twenty days, yet the hottest day of the year was not 13th August with 79·2, but 29th May with 79·7. The highest May temperatures for Scotland were 81 at Wolflee and 80 at Kelso. So we come to the record cold of December 1879, to which I have already referred. At Springwood, frost lasted from 22nd November to 15th December, and there were three zero temperatures, including the record, -16. On 3rd December the maximum was only 11. As an example of the damage to vegetation, Dr Stuart recorded walking through the park at Swinton House in July, 1880, and, especially near the Leet, noticed that the fine old oaks showed no appearance of fresh growth. As if two cruel winters had not been enough, January 1881 seems to have been colder than any month before, although the Blackadder temperature was one degree higher than December 1879. It has the lowest mean temperature (29·1), for Edinburgh, of any month in Manley's table. Kelso had six minima below zero. Wood-pigeons fell out of trees frozen and starved: pigeons and partridges allowed themselves to be caught by hand. Dr Stuart said that in the Vale of Blackadder destruction was worse than anywhere. All evergreens were killed to the ground: yews and Irish yews were fatally damaged, also wellingtonias, box, privet and ivy. One hundred and ninety fruit trees were destroyed in the garden, including trees on the walls. At Kelloe on the night of the 26th, when the temperature was well below zero, limes and oaks were heard to rend with a loud report from the expansion of the sap.

Reports of Meetings for the Year 1947.

To the surprise of all members who attended the meetings, the weather was all that could be desired and, indeed, with 1933, proved a record.

1. The first meeting of the year was held on Thursday, 15th May, when some 80 members and friends met the President at Pennymuir. The early morning was doubtful, and most members carried coats or waterproofs, while some sported warm scarves, for there was still a nip in the air and a considerable amount of snow still lying on the lower slopes of the Cheviots. Leaving Yetholm, a long procession of cars wended its way up the Kale Water valley to the cross-roads on Dere Street at Pennymuir. Here the President welcomed the members and introduced the speaker of the day, Sir Walter de L. Aitchison.

The first part of the programme consisted of a description by Sir Walter of a new Roman Marching Camp discovered recently through air-photographs. Though the exact site of this has not yet been fixed definitely by survey, he led members round, and pointed out some indications that may well prove to be correct. His description, and also that of the forty-four-acre Marching Camp which has been known for some time, was brought out in numerous copies of map-photographs which he distributed to members, who were then led round the boundaries of the large camp.

Rejoining the cars, members drove down to the Kale Water at Towford (corruption of "Two Fords"). Owing to a thunderstorm the preceding day the Kale was full, and considerable care had to be taken in driving through the water; one or two cars fought shy of it.

From Towford there was a climb on the Roman Road to Streethouse, a distance of about a mile, with a rise of five hundred feet. To those who were not there, this was not quite so easy as it sounds, for the road itself is invisible under thick tussocky grass. Quite a thrill was experienced by some of the members when Sir Walter's son, David, came to the rescue with a jeep. At parts where he drove across the steep slope his passengers sat on the outside edge of the jeep to prevent it from upsetting!

At Streethouse the road bends round the slopes of Woden Law, on the summit of which is an Iron-Age fort. Between Streethouse and Woden-Law-Neck most of the Roman Road has been washed away, but the "Neck" (or bridge) is important, as it connects Woden Law with the Cheviot massif. It is the key to the whole crossing of the Cheviots and so it is not surprising to find that the Roman engineers, with their usual accuracy, seized upon it for their main road. Near the Neck faint indications of five linear earthworks were pointed out and their purpose explained. The end of the walk was to the top of Blackhall Hill, where members got a magnificent view of both sides of the Border. The day's outing finished at the Cross Keys Hotel, Kelso, where some 30 members sat down to tea with the Vice-President.

The following new members were elected: Mr Charles H. Brackenbury, Tweedhill, Berwick; Rev. Robert Duggan, Christ Church Rectory, Duns; Miss H. B. Fleming, East High Street, Lauder; Mrs Mary M. Hutchison, The Chesters, Lauder; Mr Philip James, 4 Quay Walls, Berwick (membership not completed, as he has since left the district); Mr Colin D. Martin, Friarshall, Gattonside, Melrose; Mr George E. Meston, Madrona, Melrose; Mr J. W. Home Robertson, Paxton House, Berwick; Mr Nathaniel W. Williams, Kirklands, Ayton; Mrs Margaret S. Wright, St Leonards, Berwick.

2. The second meeting, held on Thursday, 12th June, was, as regards weather, progressively better in that there was no need to carry coats. About 70 members and friends met the President in Swinton church, where they were addressed by the Rev. J. B. Longmuir, M.A., B.L., Minister of the Parish. In outlining his church's history, he depicted its special features, and also dealt with the parish of Simprim, which until 1761 was a separate parish.

The church was most intimately concerned with the family of Swinton, which had been connected with the village for 800 years. It was not known just when the building was first erected, but there was a strong suggestion of the presence of a church there in the early eleventh century. For example, it was known that in 1089 part of Simprim parish was handed over to the monks of Coldingham Priory, and where there were monks

there were usually churches. Mr Longmuir explained that originally the church had been a long, narrow building, but that on being united with Simprim in 1761 alterations were made. One of the many features of the church is the statue of a knight. The figure itself is crude, and while some experts maintain that it is of late origin, others say that it must be an early one, probably twelfth-century. By some accounts it is a statue of that great figure, Sir Alan Swinton, who lived about 1250. He was reputed to have wielded a mace which no one else in Scotland could carry. One of three skulls found beneath the church is massive, and thought to be that of Sir Alan.

The bell of the church, one of the most ancient in Scotland, is dated 1489; inscribed on it in Latin is: "Mary is my Name"; it is thought, therefore, that the church was dedicated to the Virgin Mary. A specially painted window was installed to commemorate the return of the Swinton family to Swinton House.

In regard to Simprim, James II gave it to the Convent of Coldstream; although the date of erection is again unknown, it did exist in the reign of David I. Its most prominent minister was Rev. Thomas Boston, 1699-1707, and under the ministry of Rev. James Landreth, 1725-1756, what was probably the first Sunday school in Scotland was started. All that remains of the church are the east wall and part of the north wall of the chancel.

Members proceeded from the church to Swinton House, home of the Swinton family for generations, and now that of the late President, Mr Swinton, who outlined the history of the building. The site of the original house is not known, but probably at one time the family lived at Little Swinton and in troublous times went up to Cranshaws Tower, where it was safer. Last century the house was burned down, and the main block was rebuilt by Lord Swinton. The stones come from Swinton Quarry, which also produced much of the material for the War Memorial in Edinburgh. Members were taken over the house by Mrs Swinton and viewed the numerous paintings and other treasured relics, while the functions of the several meteorological instruments on the terrace were explained by the President, and an enjoyable tour of the gardens was made.

The day finished with a drive through the policies and a visit

to the Dundock Woods, on the Hirsell estate of the Earl of Home. The display of azaleas and rhododendrons was truly magnificent, and a tulip-tree in the gardens (date *c.* 1727) proved an object of special admiration. About 40 members joined the President at tea in the Newcastle Arms, Coldstream. The following new members were elected: Mrs Ella C. Brown, West Learmouth, Cornhill; The Rt. Hon. The Earl of Haddington, M.C., Mellerstain, Gordon; Mrs Elizabeth F. Herriot, Hopeville, Berwick; Miss Margaret Maclaren, Braehead, Bowden, St Boswells; Mrs L. F. Scott, O.B.E., Langlee, Jedburgh.

3. The third meeting was held on Wednesday, 16th July, when 70 members and friends joined the President on the village green at Elsdon, and were addressed in the church by Mr C. H. Hunter Blair, Newcastle, President of the Club in 1929. The weather, so far as the meeting was concerned, remained good, though on the homeward journey one of the most violent thunderstorms of recent years broke over the Borders, incidentally dampening the Royal Garden Party at the Palace of Holyroodhouse. This meeting was to have taken place in 1939, but was cancelled on account of the war.

In the church Mr Hunter Blair unfolded its history, as well as the centuries-old story of the present rectory, and the near-by Norman castle. In explaining that Elsdon Parish Church had been dedicated to St Cuthbert, Mr Hunter Blair said it was most improbable that the church could be considered as one of the resting-places where the Saint's body had been left when the monks fled with it from Lindisfarne. Built about the beginning of the twelfth century, the west end of the building is the most ancient. The pillars built into the wall and the two small windows at each side, which were part of the original transitional Norman church, are believed to date from 1100-1110. This church lasted till about the fourteenth century, when it became dilapidated: when rebuilt, about 1350, its walls were erected inside the earlier foundations, which thus left very narrow aisles. Various monuments in the church were pointed out, including the greatest prize of all, a stone Roman tombstone. As there was no Roman station in the village itself, this had probably been brought, for some unknown reason, from the neighbouring station of High Rochester, or Woodburn. Behind the font was

a box containing the skulls of three horses which were found during restoration work in 1877, and are thought by some to indicate the survival of an old pagan custom. Near the porch are deep scratches, supposed to be the work of the warriors of Elsdon when sharpening their arrows and swords before leaving the church.

After Mr Hunter Blair's talk, members visited the sixteenth-century rectory close by, built on to a pele-tower. The pele is a typical example of a Border tower and is one of the best in Northumberland. In the days of Scotch raids houses were needed that would be reasonably safe not only against these raids but also in the face of the invasions of the Redesdale "wild men." On the south front of the tower is a shield of arms of Sir Robert de Umfraville, Knight of the Garter and Lord High Admiral of England, who made a considerable mark in his lifetime, and was probably the last of his family.

The members walked to the Mote Hills near by, which, Mr Hunter Blair said, had nothing to do with the Ancient Britons. The name is a derivation from the French word "motte"; in other words, a Norman castle. Its date is probably about 1080. Robert de Umfraville would have built that hill as his castle and his house upon it, while his retainers lived in the valley. The earthworks remain much as they were originally in the twelfth century, and, because they have never been built upon, are the finest example of early Norman castles in Northumberland. During the visit to Elsdon, members benefited from the fund of knowledge of a local bird expert, Mr Jasper Storey, who answered their enquiries on bird life there.

The last item of the meeting was a visit to the site of Percy's Cross beyond Otterburn. Mr Hunter Blair gave the members a graphic description of the "deed that was done at Otter Borne," and of the struggle on 19th August 1388, when the odds were three Englishmen to one Scot. The present monument is not the original cross, which was destroyed.

The following were elected members: Mrs Nancy Barstow, Wedderburn Castle, Duns; Mrs Elizabeth W. T. Dalziel, Nether Hallrule, Hawick; Miss Mary B. G. Leadbetter, Spital Tower, Hawick; Mrs Dorothea G. Wilson Smith, Cumledge, Duns; Dr William A. Wilson Smith, Cumledge, Duns; Miss Dorothy M. Taylor, Kirkhill, Coldingham; Mrs Marion E. M. M. Thomson,

Kingswood, Kelso; Major-General Sir Gordon Wilson, Meadow House Mains, Hutton, Berwick.

4. The fourth meeting was held on Thursday, 21st August, at Abbotsford and Melrose. As was now becoming usual, some 70 members and their friends met the President in bright sunshine on what proved to be one of the warmest days this summer. Many male members removed their jackets; ladies were already suitably dressed, and some produced parasols.

At Abbotsford the Club was conducted over the old home of the great novelist and were shown a wealth of interesting relics in the hall, in Sir Walter's study, the drawing-room and other rooms, finishing up on the grass terrace, where they viewed the "Silver Tweed." Lunch was taken in the beautifully laid-out gardens of Mr F. R. N. Curle at Greenyards, Melrose, where members were welcomed by Mrs and Miss Curle.

At Melrose Abbey the party was addressed by Mr J. S. Richardson, Chief Inspector of Ancient Monuments. His talk was heard with great interest, for he has authoritative knowledge as well as a graphic way of reconstructing scenes from the life that was lived by the monks of Melrose Abbey. Since the buildings became the property of the nation, in 1913, considerable work has been done in clearing away undesirable buildings, but there still remains much to be done. The Abbey Hotel has now been acquired for future demolition and exploration.

From the Cloister Square (on the walls and foundations of which members were seated to listen to Mr Richardson) the various parts were pointed out: the lay-brothers' hall, refectory, kitchens, monks' house, chapter-house, etc. The founders and builders were Cistercian monks from Rievaulx Abbey in Yorkshire. The water supply to the monastery must have presented a problem, but Mr Richardson told how the monks overcame the difficulty. Burns running down from the Eildons were insufficient, so a cauld was built across the Tweed above Melrose and the water was conveyed in an enclosed channel through the grounds, the overflow being led back to the river lower down its course. Much of this channel has been uncovered and the lay-out of the system can be easily seen.

In the thirteenth century the number of the lay brothers was increased, and a large extension had to be made to their hall,

whose foundations were continued under the Abbey Close and as far as the present Museum; while in the fifteenth century the Abbey itself was extended. During the excavations of the chapter-house a human heart was found enclosed in a leaden casket. Many have thought, said Mr Richardson, that this was the heart of Robert the Bruce, but as it was impossible to prove the owner, it was reburied where it had been found. A crest on the walls was pointed out showing the origin of the name Melrose: from "mell," a stonemason's hammer, and a rose, the Cistercian emblem.

In the Museum, which was opened by the Duke of Buccleuch in 1946, members were shown cases containing examples of masonry, tiles and pottery, and lead pipes unearthed during excavations, many fragments being found in the main drain; also masons' marks and some relics from the Roman Camp of Trimontium at Newstead. Drawings of reconstructed Abbey buildings made by Mr Richardson were most helpful in giving an idea of the originals. The meeting ended at the Bonaccord Hotel, where some 30 members joined the President at tea. The following ladies were elected as members: Mrs Winifred A. T. Knight, 1 Wellington Terrace, Berwick, and Mrs Helen J. Scott, Westfield, Coldstream.

5. The fifth meeting was held at Dirleton and Tantallon on Wednesday, 10th September, when some 60 members joined the President on the green at Dirleton village. The forthcoming cut in the petrol ration had a distinct effect on the number of cars appearing, quite apart from the meeting-place being a thirty-mile drive from the home counties.

On arrival at the castle entrance, members were met by Mr S. H. Cruden, Assistant-Inspector of Ancient Monuments, and, after the President had introduced him, a move was made to walk round the exterior cliffs on which the castle is built. Pausing on the modern wooden bridge over the moat, Mr Cruden described the towers and entrance gate. The castle is an inspiring ruin, the original plan being a walled enclosure with towers at the angles. Mr Cruden explained that Dirleton is one of our few thirteenth-century castles and was a purely military building. Standing in the main entrance, where the portcullis is situated, he explained how the gateway and the

whole castle could be guarded, and drew on one's imagination of life in the far-off days. Inside, the courtyard would be like a self-contained village, with its kitchen, bakehouse, storehouses, etc.; upstairs would be the great hall, with a very fine piece of work at one end, the buffet, the minstrels' gallery and the chapel, with some interesting architectural points. The grounds of the castle, where members took their lunch, are kept in excellent order by the custodian and include a long herbaceous border and a bowling-green.

Before leaving for Tantallon, an extra item was arranged unexpectedly in the shape of a visit to Dirleton Parish Church. Here members were met by the minister, Rev. H. O. Wallace, M.A., who guided the party, first round the outside, explaining the different points of interest, and then round the inside. Although, he said, there was nothing outstanding in the church's history, it did date back to 1612. A stained-glass window erected to the memory of Mrs Russell, a great lover of nature, was greatly admired. Mr Wallace also mentioned that the late King Edward VII had worshipped in the church.

Rejoining the cars, members drove by North Berwick to Tantallon Castle, where the party was increased to over 70. The castle was a famous stronghold of the Douglas family, and here again Mr Cruden touched on points of interest, beginning with the means of defence. The dates of construction extend from the fourteenth to the sixteenth centuries. The walls are so thick that mural chambers were constructed inside them, and as the knowledge of ballistics increased, so, for defensive purposes, the walls were built progressively higher. Mr Cruden directed special attention to the "wall-walks," which would have sentries constantly on duty upon them. The castle had been besieged very often, particularly by James V, while in 1657 it was taken by Cromwell's troops. The speaker gave it as his opinion that Tantallon was one of the finest and most dignified castles in Scotland.

Members explored the castle thoroughly, many descending into the "pit" into which prisoners were thrown. They also climbed the circular stairs in the towers, and from the "wall-walks" obtained a magnificent panorama in the clear afternoon air, from the Lammermuirs in the south to the Firth of Forth in the north and east, with the Bass Rock apparently a stone's-

throw away. The meeting, held under most superb conditions of weather and colouring, ended with tea in North Berwick, where some 40 members joined the Vice-President.

6. The Annual Business Meeting was held on Wednesday, 1st October, at 2.30 P.M., in the King's Arms Hotel, Berwick: 44 members were present.

The Rev. A. E. Swinton, M.A., opened the meeting with a few words of welcome, after which he read his Presidential Address. Its title was "The Study of Weather with Special Reference to Cold Winters," and Mr Swinton dealt with various branches of meteorology all having a bearing on our "climate." Many of the results of his work in the past 32 years can be seen in the meteorological reports published in each volume of the *History*. The address was listened to with particular interest, as being a subject of very general concern, and at its conclusion there was prolonged applause.

Mr Swinton then announced that, his term of office having come to an end, he had pleasure in appointing Major H. R. Smail as his successor, and handed over to him the Club Flag. Major Smail, in accepting, thanked Mr Swinton, and expressed the hope that he might be able to "carry the flag" as well as his predecessors. Mr Hastie then proposed a vote of thanks to Mr Swinton for his services during the past eight years. Major Smail's first official act was to nominate The Right Hon. The Earl of Home as Vice-President for 1947-48, and this was unanimously approved. Thereafter the following business was transacted:—

Secretary's Report—1947.

This year will be long remembered for two reasons: its opening spell of exceptionally severe and prolonged snowstorms (which did not affect the Club's meetings) and the wonderfully good weather on each of the five Field Meeting days. All these meetings were well attended.

Since the last General Meeting the Club has lost by death eleven members, including two ex-Presidents—Rev. H. Paton and Mr A. H. Evans; the latter since 1931 was the "Father of the Club."

25 new members were admitted during the year, making the membership as at this date 341.

The Report was unanimously approved.

(*Note*.—For considerations of space, the usual précis of Nature observations is omitted from the Secretary's Report. The "notes" appear in full on pages 51 to 56 of this number.)

Owing to the unfortunate accident sustained in summer by Mr R. H. Dodds (who meantime had sent in his resignation as Treasurer) and also to the illness and resignation of his colleague, Mr A. M. Porteous, the Treasurers' Report (p. 64) was read by the Secretary. An extract was read from a letter from Mr Dodds' son (who had been instrumental in making up the Balance Sheet) to the effect that "until new treasurers were appointed he was willing to look after the Club's financial affairs, subject to the Club asking him to do so." After some discussion the Report was approved. The Secretary was instructed to convey to both Mr Dodds and Mr Porteous the Club's gratitude for their long and zealous service.

The election of office-bearers followed, the Secretary, Assistant-Secretary, Editing Secretary and Librarian being reappointed. The names of Mr Thomas Purves and of Miss H. F. M. Caverhill were proposed and seconded for the office of Joint-Treasurer, and both appointments were approved. Their places as Co-opted Members of Council have since been filled by the Rev. A. E. Swinton and Mrs M. H. McWhir, Aberdour.

The following new members were elected: Dr Ralph R. Hair, Vinegarth, Chirnside; Miss Sarah Little, The Vicarage, Norham; Mrs J. C. Mather, Westmains, Milne Graden, Coldstream; and Mr T. C. Robson, Springvalley, Kirk Yetholm.

In spite of the petrol cut, due to come into effect before the end of 1947 and lasting probably well into 1948, it was decided to hold the usual field meetings, but at places which would be accessible by train or bus. It was left to the Council to decide on these.

Arising out of the Secretary's Report on Ross Links, a motion was proposed, seconded and carried that a formal resolution be sent to Field-Marshal Viscount Montgomery to enlist his interest in getting the War Office to de-requisition the area; such resolution to be drawn up by the Council.

The question of the Annual Subscription was raised, but after

discussion the matter was deferred until next year's Annual Meeting.

The President thanked members for their courtesy during the past year, and wished the Club all success in 1948.

An abridged Report on the Council Meeting held at Berwick on 7th November is annexed, as bearing on several matters discussed at the Annual General Meeting:

Before commencing the business of the meeting, the President referred to the Club's welcome of Lord Home as the new Vice-President. He also mentioned an invitation he had received from the Royal Society of Edinburgh to attend a ceremony in Greyfriars Churchyard at the grave of James Hutton, Geologist, on the 150th anniversary of his death, which falls next year. In his Memorial Address to that Society Sir James B. Bailey, F.R.S., had mentioned that for some years Hutton farmed Slighouses in the Bunkle area of Berwickshire.

The locations of five Field Meetings in 1948 were fixed out of more than double that number suggested by members; all more or less accessible by train or bus on account of the petrol cut.

As there was a vacancy in the Council of the lady Co-opted Member, it was decided to offer this office to Mrs M. H. M'Whir, Aberdour, who, subsequent to the meeting, wrote accepting, and saying that she felt it an honour to have been asked.

The practically negative result of the resolution regarding Ross Links passed at the Annual General Meeting on 1st October, and sent to Field-Marshal Viscount Montgomery, was reported.

As the owners require the building, which hitherto has housed surplus copies of the *History*, and various other extraneous periodicals, it was decided to utilise meantime a storehouse in the town until they could be disposed of. Later, the Librarian reported that the weight of the whole collection of volumes, etc., amounted to $6\frac{1}{4}$ cwt.

In the first "billet" of 1948, intimation will be made that back numbers of the *History* are offered for sale to members at 6d. per copy. The metal and wood of used "blocks" are to be sold to blockmakers, as both are now in short supply.

The Club Delegate's Report of the British Association's Conference held at Dundee in August is given in full on page 57.

A Report was made of a cist uncovered near Coldingham in

October, the age of which could not be officially determined, as it contained no relics of any kind.

A donation of two guineas was received from a former member of the Club.

On the question of the annual subscription, already deferred to the 1948 meeting, it was decided that, in view of the greatly increased costs of production of the *History* reported on by the Treasurers, a definite motion be then brought forward that "the Annual Subscription be raised to (a) 15s., (b) 20s."

At its present rate the cost of production of the *History* would appear to absorb most of the subscriptions, and the *History* to be practicable only if reduced in size.

It was decided that the cost of extra copies of the *History* to members be restored to 7s. 6d. per copy, and to non-members to 10s. per copy, as in 1921.

Finally, it was decided that the former Rule of 1925 be revived, by which "Members attending meetings shall hand their cards to the Secretary, in order that the Reports may contain a full list of those present"; and that a notice be inserted in the "billets" to this effect.

PENNYMUIR, WODEN LAW AND DERE STREET

By SIR WALTER DE L. AITCHISON, Bart., M.A., F.S.A.,
F.S.A.Scot..

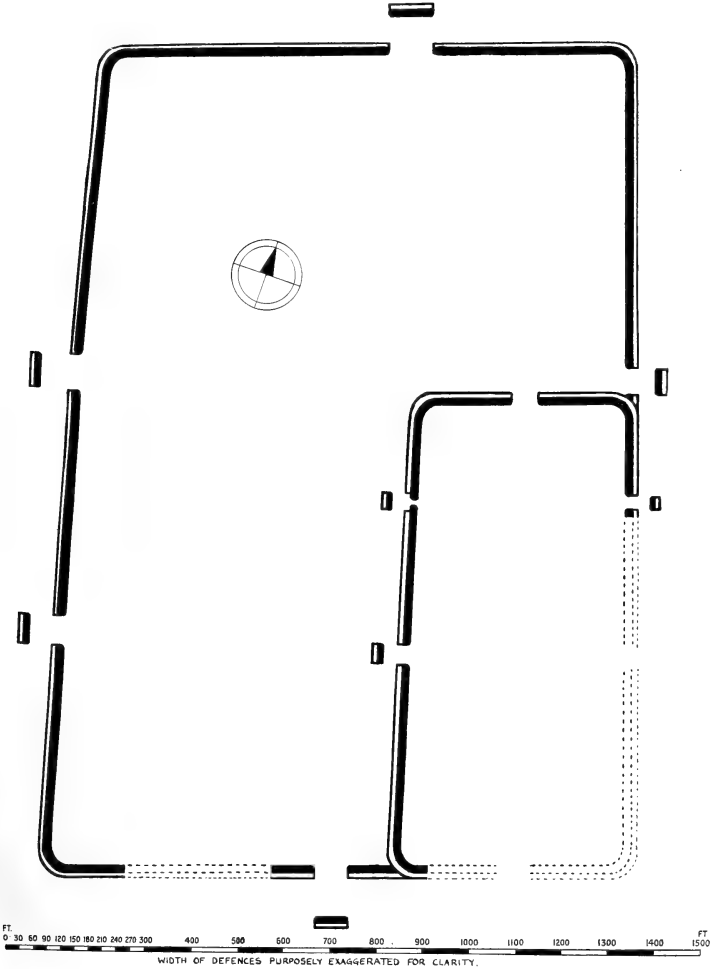
THE ordinary tourist coming to Pennymuir—probably by accident, because it is on the road to nowhere in particular—would not be enthusiastic about the neighbourhood. To the casual eye the scene is dreary and rather featureless, and only a few people are aware that behind this uninviting façade lie things of rare interest and curiosity.

Nowadays the name Pennymuir is attached only to a cottage at a road junction. The cottage, which until 1896 was a licensed inn, is now empty and derelict; and Mrs Scott, who until the spring of 1947 had lived there for twenty years or more, once told me that walkers and motorists used to knock at her door and ask the way to Pennymuir. When told "This is the place", they would say, "This Pennymuir? Why, we thought Pennymuir was an important place. There are signposts to it all round about." As indeed there are.

In point of fact Pennymuir not so long ago was quite a famous place, locally. It was the scene of an annual fair, which used to be held in the field immediately to the west of the cottage. It began as a sheep-fair; then amusements were added. The sheep-sale part gradually died out, but the amusement side lingered on alone; and the last recorded gathering took place in 1908. In its hey-day the Pennymuir Fair included horse-racing, stalls, showmen, and the inevitable muggers.

The name Pennymuir doubtless attached originally to the moor in the vicinity of the cottage rather than to the cottage itself, and the why and wherefore of the old-time fair is a matter deserving some examination.

You come to Pennymuir either from the east via Hounam, or from the west via Oxnam. In either case you climb up to it for the last mile. And yet, when arrived, you may be some-



ROMAN MARCHING CAMPS AT PENNYMUIR • 1946 • D.E.T. W.C.L.A.

[To face p. 22.]



what surprised to realise that you are in the centre of a wide-spread basin, with a perimeter of high hills and moorland surrounding you a mile and more away in all directions.

This basin, with the two or three valley-heads that come down into it, is, and doubtless always has been, good sheep-raising country. The Hindhopes, Plenderleith, Riccalton, Middleknowes, are all of them ancient homesteads and are still well-known names for sheep. And thus there was an immediate and local reason for holding a sheep-fair at Pennymuir.

But something else was needed—support from and communication with country further afield; and this was provided at Pennymuir, apart from local tracks, by the great north-south Roman Road called Dere Street, upon which Pennymuir actually stands; and also by several ancient, unmetalled but serviceable drove-roads passing west of Pennymuir on their way to and from England. Along these old roads until comparatively recent times went droves of Scotland's sheep and cattle southwards every autumn for sale in England, and, in both directions all the year round, a constant traffic of pack-horse convoys, the soft trackways providing comfort for hoof, and demanding no turnpike tolls. Their day finished as trans-border highways, they served again for Pennymuir Fair.

But nowadays the visitor to Pennymuir comes to see the "Roman Camps" printed on his map, expecting usually something more spectacular than he'll find. The camps are there all right, a hundred yards or so south of the cottage. Correctly, they are designated Marching Camps, and consist of a smaller camp superimposed upon a larger one; and they are constructed of earthwork only.

But before we proceed to examine them, and to separate their shapes from a confusion of earthworks added later, let us be as sure as possible what they are. The expression "Marching Camps" means that they were measured out, built and used by Roman troops on the march. They were, therefore, only temporarily occupied. "Temporarily" is vague. It might mean only a night's rest. It could equally cover a stay for as long as a month, or perhaps even longer. But Marching Camps were always alongside roads, and contained no permanent buildings. Inside the shelter of the ramparts the soldiers slept in tents. And it is only common sense to suppose that a

Marching Camp built and occupied by one unit would be used by other troops travelling the same road later.

The Pennymuir camps are surprisingly well preserved, the top of the rampart standing even to-day eight feet above the bottom of the ditch in some places. But the area embraced is so large—forty-two acres—that the visitor is likely to have difficulty in getting the hang of the lay-out; since from no single point of vantage is the whole site visible. Moreover, the land upon which the south-east portion of both camps rests has at one time been under cultivation, and surface features in this part have been ploughed out. And another confusement comes from the presence within and without the camps of post-Roman dykes of relatively modern date. The sketch-plan facing p. 22, for which I am mainly indebted to Doctor J. K. St. Joseph's careful survey¹ in 1935, makes the whole thing plain. It will be observed that neither camp is quite rectangular, their east and west sides converging slightly to the north; and also that the west rampart of the larger camp has a two degrees bend-off at the *porta principalis sinistra*. But accurate recovery of the original plan is made almost certain by the happy escape from elimination by the plough of the south gateway of the larger camp (which we will call Camp A), together with the south-west angle of Camp B.

The ditch of Camp B at its north-east angle can be seen cutting through the rampart of Camp A, thus disposing of any doubt as to which work preceded the other. Camp B was the later of the two.

A fortunate chance has enabled the south side of the east quintan gateway of Camp B to survive extinguishment by the plough, and it will be noted, too, that the west quintan gate of Camp B has apparently been reduced in width by partial filling-up.

Another point of detail to observe is that the presence of a natural watercourse immediately in front of the south gateway of Camp A has obliged the engineers to place the protecting traverse² at an unusual distance in advance of the rampart.

¹ *Proceedings of the Society of Antiquaries of Newcastle-on-Tyne*, vol. vii, p. 107.

² A traverse is an arrangement of rampart-cum-ditch forming an advanced protection to a gateway-opening.

Without going into technicalities of Roman castrametation, it is interesting to observe, too, that the arrangement of the gateways in the two camps suggests that Camp A was built to face north, and Camp B to face south.

The circular earthwork situated in the south-west quarter of Camp A, which has often puzzled people, is not Roman. It is a sheep-stell of comparatively modern date; as also is a somewhat similar enclosure to be seen outside the west rampart of Camp A. The rather wavy bank and ditch inside Camp A, and roughly parallel with the west rampart, is a boundary-work of some kind, probably medieval.¹

Again, running eastwards from the east rampart of Camp B are several linear banks. These, too, are post-Roman. They are doubtless field-dykes connected with the vanished farm shown on Roy's Map²—then called Street House, the site of which can easily be picked out to-day on the east side of the modern road (which roughly corresponds in this part with the line of Dere Street).

As to dating precisely the Roman works, we have not much evidence to help us. We know that Dere Street was constructed by Agricola³ as one of his two main lines of communication to support campaigns in Scotland in A.D. 79–82. Under ordinary conditions a normal day's march for Roman troops did not exceed ten or twelve miles, and over rough country the distance was less. The nearest stage south of Pennymuir was the station at Chew Green, four and a half miles away, provided with a variety of military accommodation⁴; the next stage north was at Cappuck, eight miles off. Cappuck, as known, is a small permanent post defending the Oxnam crossing, but it is likely that one or more Marching Camps, now obliterated to the terrestrial eye by cultivation, lay in the vicinity; and some day air-photography may discover their whereabouts. Both Chew

¹ One naturally wonders why it was dug, when the excellent Roman work only a few yards away could presumably have been adapted to serve the same purpose, whatever that was. And, incidentally, air-photographs show that this ancient boundary-dyke continued beyond the limits of the Roman works for several hundred yards to the north.

² *Military Antiquities of the Romans in Britain*, Major-General W. Roy, 1793 (see *Ber. Nat. Club History*, xxvi, 42).

³ *Agricola's Road into Scotland*. Mothersole, 1927.

⁴ *Archæologia Aeliana*, vol. xiv, p. 129.

Green and Cappuck have yielded evidence of Flavian occupation, and it is therefore reasonable to suppose that at any rate the earlier of the Marching Camps at Pennymuir, a convenient resting-place, was also the work of Agricola's army.

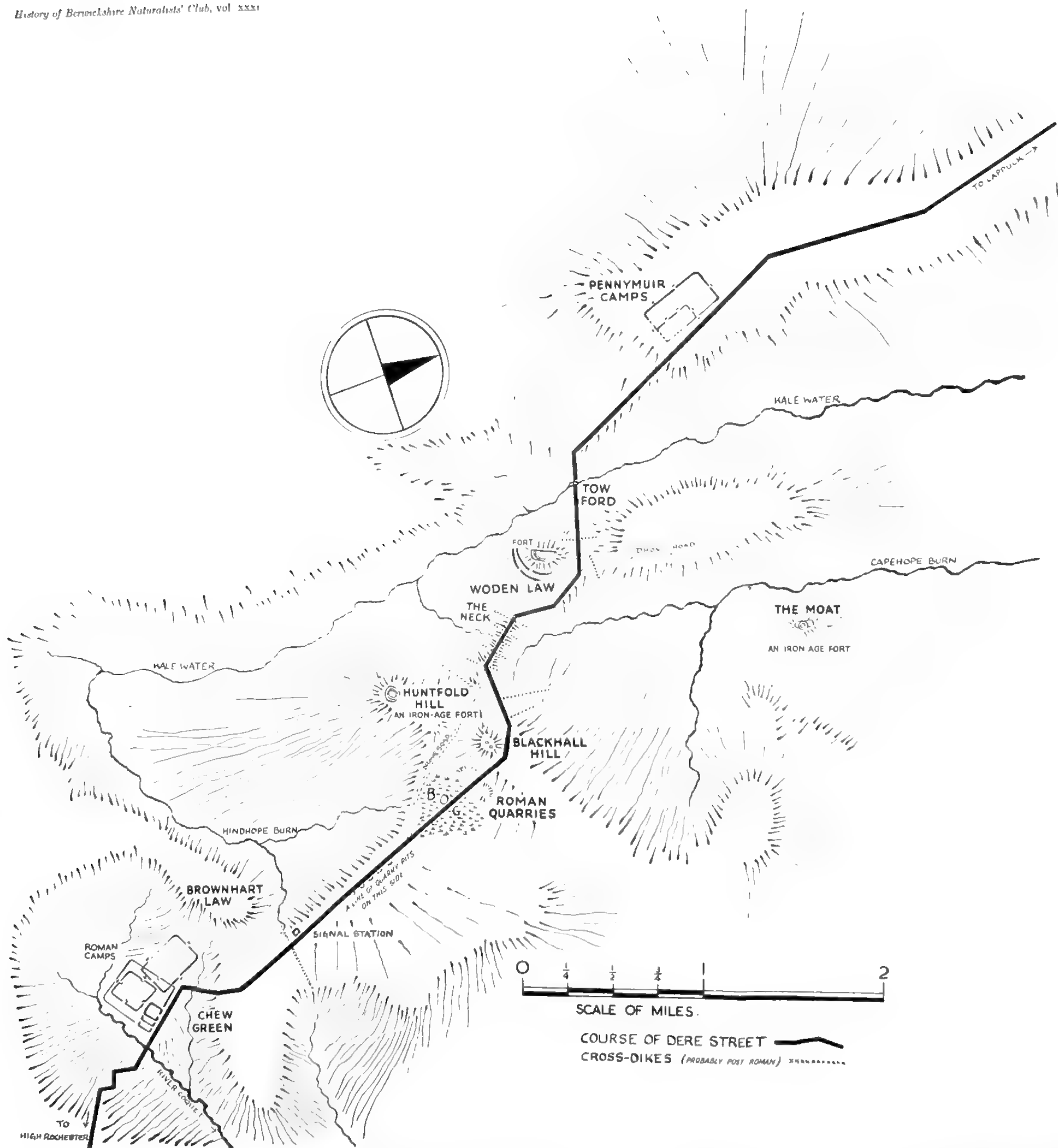
All we can say with certainty, therefore, about the dates of the Pennymuir Camps is that they were built not earlier than A.D. 79, and that they probably ceased to be used by regular troops after the conclusion of Severus' campaigns in A.D. 208-211,¹ following which the normal form of Roman military government soon came to an end in these parts.

But before we leave the Pennymuir Camps it should be recorded in these notes that in 1946 air-photographs (though undertaken for a purpose unconnected with archæology) disclosed a feature to the east of the site we have been considering which suggests that a third Roman Marching Camp may have lain at Pennymuir. The feature consists of a straight bank and ditch 855 feet long, roughly parallel with and to the east of Dere Street, and north-east of Camps A and B. It has rounded angles at both ends, and the beginnings of eastward extension. The south angle continues eastwards for about eleven feet, where bank and ditch disappear into soft ground intersected by modern drainage ditches. The north angle is clearer, and is prolonged eastwards for at least 210 feet, until it disappears under once-cultivated ground within a couple of hundred yards of Tow Ford Cottage. The surface indications, as visible to-day, are inconspicuous but clear. If they are in fact all that is left of a third Marching Camp, post-Roman farming and softer subsoil must have been responsible for partial disappearance. But against the argument of the work being Roman are two circumstances, though neither is conclusive; (a) the site is a poor one, the southern half being on steeply sloping ground, (b) no gateways are now visible, either in the photographs or on the ground, in the whole length of the postulated west rampart. So we must mark this feature as "unproven," with the balance of evidence rather in favour of its Roman origin.

In the course of examining the Pennymuir remains the visitor's

¹ For a postulated Severan occupation of the fort at Cappuck, see I. A. Richmond's remarks in *History of Northumberland*, vol. xv, p. 96.





A DIAGRAMATIC SKETCH-MAP OF
THE LINE OF DERE STREET FROM THE COQUET-INCLINE TO PENNYMUIR RIDGE. W. & L. A. 1947.

thoughts must often turn to the great road which once ran past here, and still does. Speculation stirs the mind. Where did it begin, and where did it stop? And why did it come just this way? What was it built of, and how did it look when the Roman soldiers marched along it?

These pages are not the place to enter into a long account of Dere Street, but for an intelligent understanding of what can be seen of the road within a mile or two of Pennymuir something of the general background is necessary.

Dere Street, then, started from the legionary H.Q. at York and finished on the Forth-Clyde frontier-line. Its purpose and use was definitely military, though it is probable that even in Roman times civil and commercial passage was not forbidden; and it has carried traffic for 2000 years. In Yorkshire, County Durham and south Northumberland it is in use to-day; and from Redesdale northwards, across the Cheviots and on through the Scottish Lowlands, Dere Street was an important thoroughfare until at any rate the end of the eighteenth century.

Being primarily a military work, the road's general course was governed by argument of strategy, and it was this circumstance which forced the road through to Redesdale, and thus presented the Roman engineers with the problem of grading their route across a tangled hill-system, the axis of which tended to run athwart the shortest traverse.

The line of communication as the road was driven north had been secured by the establishment of permanent garrisons at all important river-crossings (Catterick Bridge, Piercebridge, Binchester, Corbridge, Risingham, High Rochester, to mention by no means all of them).

For about seven miles north of the permanent fort at High Rochester the engineering of the route presented no unusual difficulties. The road climbed steadily and evenly from 700 feet to the 1700 feet escarpment above the headwaters of the Coquet. The descent of this northward-facing edge was skilfully managed by taking the road down in a series of terraced zigzags, which, though abandoned by the medieval carriers, can be discerned today, by the trained eye, when looking southwards from Chew Green.

The remarkable knot of Roman Works at Chew Green was unravelled by Dr Richmond in 1936, and I refer to them here

only as a halting-stage, already mentioned, on our road—but with one particular point, which will be illustrated shortly.

To get through to the Kale Valley and to the open country beyond, where the Pennymuir camps lie, the Roman engineers had to drive their road through a line of country apparently more difficult than any they had yet encountered, or, on this route, would meet again. Ahead of them lay a bewildering tangle of rocky tops, boggy plateaux and steep-sided cleuchs. To troops marching north from one or other of the Chew Green camps the prospect in front must have seemed pretty grim. But actually the route adopted had been so skilfully surveyed that the passage of the main mass of the Cheviots was accomplished without difficulty either for marching men or for wheeled vehicles.

The key to the comfortable crossing of the hills in these parts consists in the existence of a single topographical feature some four miles north of Chew Green. That feature is the Neck of Woden Law.

Woden Law stands forbiddingly to the south-east of Pennymuir, and appears from almost every direction to be an isolated outlier of the Cheviot massif. Actually it is not isolated. It is connected to the main range by a remarkable natural bridge, 800 feet long, and so steeply-sided as almost to provoke a sense of insecurity when crossing it on a windy day.

This, then, gives the answer to one of the questions we asked ourselves at Pennymuir—why Dere Street came this way. And the fact that the road-makers used the Woden Law Neck clearly proves that a survey party had already reconnoitred the route, and had grasped the importance of the Neck before construction began.

But the use of the Neck for carriage of their road involved, both in approach and departure, a succession of almost right-angle bends in the routing. The traditional straightness¹ of Roman roads had necessarily to be abandoned in the Chew Green-Pennymuir sector of Dere Street. In this four-and-a-half-mile stretch six radical re-alignments were required, in order to enjoy the relatively level and easy transit made available by the seizure of the Woden Law Neck.

¹ In difficult terrain sinuosity in the course of Roman roads is by no means so uncommon as is popularly supposed.

The first sharp bend occurred immediately north of Chew Green, in order to carry the road in a wide ascending curve round the eastern shoulder of Brownhart Law. Once round this corner Dere Street is projected in a straight line onto the east declivity of Blackhall Hill a mile and a half ahead, following the watershed (as does the Border Line today) between the Kale Valley to left and the Coquet streams to right. When the road gains the crest at Blackhall it is confronted by a steep descent into a sort of double Devil's Punch Bowl, formed by the headsprings of the Capehope Burn; and Woden Law and the natural bridge leading to it are now in sight beyond. At this point, therefore, the engineers introduced another sharp curve to the west, so as to bring the road by an easy slope down the north face of Blackhall towards the approach to the Neck. In half a mile, with Huntfold Hill rising steeply ahead of them, they turned right-handed again and aimed straight across the Neck to gain the southern slope of Woden. Freed from boggy flats and saturated slopes, the road crosses the Neck in all the pomp and splendour of a huge causeway crowning the comb.

Having got across the Neck, Dere Street works round the eastern side of Woden Law, taking advantage of a happily provided natural shelf, until in half a mile there opens a sudden vista of all the southern uplands, with the Pennymuir camps below, and in the far distance the triple peaks of Eildon; to reach which with economy of effort and security of passage had been the overriding endeavour of the Roman engineers.

To gain the levels now occupied by the Marching Camps at Pennymuir was from this point a simple affair. The road, turning Woden Law, comes to the head of the Street House Pass, and another sharp bend to the left carries the road down the Pass. The descent is steep, but not so severe as to call for staircase-work, and the crossing of the Kale at Tow Ford is reached in one mile. After which a final turn is taken to bring the road up to the camps at Pennymuir.

The purpose of the foregoing brief description of Dere Street's crossing of the Cheviots has been to provide a sort of background to an understanding of the Pennymuir Camps. In our examination of the road we have necessarily ignored many features of

detail, reference to which would have blurred the focus. But this paper would be incomplete if mention were not made of them.

It will, therefore, be more convenient now to follow the course of Dere Street southwards from Pennymuir; that is, in a direction opposite to that in which we have in imagination lately travelled. And we will begin at Tow Ford, where Dere Street crosses the Kale Water.

Tow Ford is a very old place-name. It means the double ford (*i.e.* two-ford), and, in spite of the fact that for a thousand years or more the Kale Water has changed its bed in parts every winter, the double ford remains to this day. Ahead of us the Street House Pass climbs to the skyline, where the nick is filled by the ruins of an old house, which we will notice again when we reach it.

The exact course of Dere Street up the Pass is rather difficult to make out. Even the trained eye is at first misled by parallel track-ways of medieval or later date. The Roman Road keeps all the way up to the right-hand side of the sike which drains the Pass, and is accompanied on its left hand by an ancient boundary-dyke. The original metalling may be observed obtruding through the turf here and there at the foot of the Pass, and before the ascent steepens several stretches of quite imposing causeway will catch the eye.¹

Woden Law towers above us on the right, and about half-way up the Pass the Roman engineers have had to scarp the side of the hill to provide an artificial terrace for the road. Once recognised for what it is, this scarping is quite obvious; and more of the same kind of work will be seen later on the northern slope of Blackhall Hill.

Hereabouts, too, where the Pass is fractionally narrower, the remains of the extremities of a cross-dyke athwart the road are visible; it is the first of a large number, and we will deal with them in a later paragraph.

At the summit of the Pass we arrive at the ruined building which we saw from Pennymuir. It used to be called Street House, and is the remains of a herd's cottage, which, presumably after the dereliction of the farm shown on Roy's map, usurped the latter's name.

¹ Not so clearly seen when descending.

The present-day Street House, the third to own the name, is the shepherd's cottage in the valley of the Capehope Burn, half a mile to the east.

From the top of the Pass the Roman Road takes a rather sinuous course round the eastern slopes of Woden Law. The precise line is not clear; a few quarry-pits appear on the right hand, and its course cannot have differed much from that of the modern track; which brings us, rather suddenly, onto the northern end of Woden Law Neck.

The Neck and its crossing by Dere Street have already been described. What has not been mentioned is a series of five bank-and-ditch earthworks which span it. The two at either end of the Neck are conspicuous. The three across the middle, though obvious from a distance (*e.g.* from Blackhall Hill) and under favourable light conditions, are not so easily seen by a walker on the Neck.

We have already noticed a similar linear earthwork half-way up Street House Pass. A second can be seen crossing an old drove-road which left Dere Street at Street House No. 2, to continue northwards to Buchtrig and beyond; there are no less than five across the Neck itself; and three or four more lie across Dere Street before it turns Blackhall Hill. Thus, in a critical section of a mile or so, this ancient road has had no less than eleven "road-blocks" built across it.

As a term of temporary convenience the name "cross-dyke" has been given to this type of earthwork, which is of comparatively recent discovery. There are many of them sitting upon the old hill-roads of Roxburghshire, and a few have been found on the English side of the Border.

Weather, time and traffic have contributed to effacement, and to-day most of the cross-dykes are inconspicuous, and the road gaps breaching them are sometimes so wide that their remains are easily passed unnoticed.

Their origin and purpose are at present unknown, but the circumstance that they lie across the ancient roads, always spanning them in places where a loop-way on one side or the other would not easily be found, suggests that traffic control of a para-military character was the object of their builders.

Because the questions raised are wide, and are the subject of present research, I do not in this paper propose to enter into

further detail or speculation. Suffice it to say that those members of our Club who were of the party which visited Pennymuir in May 1947 were among the few to whose visual attention the existence of these cross-dykes has been directed.

As our examination of the line of Dere Street is resumed at the south end of Woden Law Neck, a series of regularly spaced quarry-pits will be observed on the right hand. From these the road builders obtained material for surfacing Dere Street, the mound of which hereabouts runs on the right of the present-day track.

As we approach the gap between Huntfold Hill on the right and Blackhall Hill on the left, the modern track proceeds through it, and this way is marked on the Ordnance Maps as the course of the Roman Road. But it is not so. Dere Street makes a sharp bend to the east, and the shelf which the Roman engineers cut out to provide a level platform for the road can be seen running along the north slope of Blackhall, with frequent quarry-pits accompanying it.

Once round the eastern shoulder of Blackhall, Dere Street is made to follow a straight course to Brownhart Law, as we have already seen. But there are four points of detail to be noted.

Four hundred yards south of Blackhall the road is obliged to cross a wide-spreading flow. To-day the causeway goes down to the bog and is seen rising out of it on to firm ground on the opposite side. Across the bog it is invisible. Actually the metalling is four feet below the surface.

Subsidence here must have been troublesome in Roman times, because on the southern slope of Blackhall, where the rock is only just below the turf, two biggish quarries are visible, one on each side of Dere Street. That these are Roman quarries cannot be doubted. Several thousand tons of stone have been obtained from them for maintaining the causeway across the bog in Roman times.

In the next mile proceeding south a succession of quarry-pits are conspicuous on the east side of the road; and further on at odd intervals others can be discerned, though not easily, on either hand.

Just before Dere Street begins to bend round the shoulder of Brownhart Law on its run-down to Chew Green and the sources of the Coquet, a distant view suddenly opens to the west down

the valley of the Hindhope Burn: Except in unusually hazy weather the dark castle-like eminence of Rubers Law is visible fifteen miles away. It is known that the summit of Rubers Law carried a Roman building—almost certainly a signal tower. And at this point on Dere Street, just beside the road on the west side, are the recognisable remains of another Roman signal station. It consists of a rectangular, round-cornered enclosure, with rampart and ditch, sixty by seventy feet. Its situation is such that it could have served no useful purpose other than that of long-distance communication with the station on Rubers Law.

There is one more feature in this part of Dere Street requiring our attention. Immediately south of the Roman signal station a cross-dyke spans the road. It is 335 yards long, and joins the cleuch in which the Hindhope Burn rises with another, less steep, cleuch to the east. It is not easily seen by a passenger along Dere Street, because the road gap is a wide one—the centre part of the earthwork having been trampled down by medieval track-ways parallel with the Roman Road. It has its own interest as being the last dyke across Dere Street as you go south.

The intention of this paper is now fulfilled, except for the mention of some unusual features in connection with the defences of the Iron Age fort which crowns Woden Law.

Woden Law, as has been demonstrated, is itself a feature of immense tactical importance in these parts. It dominates and commands the passage of the Neck and the use of the Street House Pass. A hostile force in occupation of the fort on the summit could forbid or seriously interrupt traffic along the route followed by Dere Street. We may take it as certain that the Romans would not tolerate its occupation whilst they needed to use the road. We do not know if, when the Romans drove their road through this part of the Cheviots, the native fort on Woden Law was already established. It may conceivably have been built after the Roman withdrawal. But it is interesting to observe that the original ramparts of the fort are themselves contained by a secondary series of earthworks, of a character apparently dissimilar to that of the fort's first defences. Pending

further investigation it would not be wise to argue too much from appearances, but the suggestion of Roman siege-works is there. And it is hoped that some day, in the not too distant future, excavation may uncover the truth.

NOTE.—Since this paper was written all doubt about the possible third Roman marching-camp at Pennymuir has been dispelled. With the help of an air photograph, Dr K. A. Steer of Edinburgh has now identified the faintly-evident but certain indication of a gateway-*cum*-traverse at a point about 25 yards south of where the surviving west rampart is cut by the modern road.

W. DE L. A.



PARISH CHURCH OF SWINTON.

[To face p. 34.



REV. THOS. ROSTON'S KIRK AT SIMPRIM, SWINTON. WITH TABLET ERECTED.

[To face p. 35.]

THE CHURCHES OF SWINTON AND SIMPRIM

By REV. J. B. LONGMUIR, M.A., B.L.

THERE seems to be no information when a church was built at Swinton. The most probable statement that can be made is that shortly after 1098 there was a church built, which was thatched. In 1271 probability becomes fact, for in that year Alan of Swinton granted a croft, the Kirk Croft, to Coldingham Priory. It must have been somewhat of a fortified place, this early church, for it had to stand several sieges, and experts have declared that traces of a "fosse" can still be seen. In 1482 "along with the two Swintons and the bastel" it was burnt by the English Army under the Duke of Gloucester, and in 1542, in what was probably the last raid on the parish, the church was defended and blood was shed in that defence.

The old Statistical Account says that the lower portions of the east, south and west walls are original.

In the building itself there are several things worthy of note. In the east there is the aumry, still preserved, but unused since the Reformation. The pillars are replicas of the Cross on the village green. The niche beside the pulpit contains a statue which is traditionally held to be the monument of Sir Alan Swinton, who died about the year 1200. A vault was later found, almost underneath this monument, which contained a coffin and three skulls, one of which, believed from its size to be that of Sir Alan, is now in the armoury at Abbotsford. The west window is a memorial to the Rev. Thomas Boston, and the stained glass in it commemorates the repurchase of the estate by the Swinton family after it had been out of their possession for a short time. Over the west door there is an ancient stone containing the words, "Mak no delay to turn to the Lord. Anno 1593."

Outside, the open belfry contains a bell which has the inscription, "Maria est nomen meum 1499" ("Mary is my name"),

and in the east wall there is a coat of arms with the initials A. S. and M. H., with the date 1635. These are the initials of Sir Alexander Swinton and his wife, Margaret Hume. A similar tablet on the north wall would seem to mark their graves.

Originally the church was a long narrow building, but after the union with the neighbouring parish of Simprim an aisle, called "The Fewars Aisle," was added to the south in 1782. At a later date still another aisle was added alongside the first, and this is the reason for the peculiar shape of the church to-day.

The whole building was restored, refloored and reseated, chiefly by the personal efforts of the Rev. D. D. F. Macdonald, in 1910, and only after a case in the Court of Session against the heritors. The most important structural alteration then was the raising of the walls by some two feet, and this necessitated a new roof. The seats are of Canadian elm, as is the pulpit, which was the gift of the Swinton family and was carved by the Kensington School of Art.

As in the case of Swinton, there seems little precise evidence as to when a church was built at Simprim. The first owner of the lands (about 1000 acres) of whom there is any record is one "Hye [or Hugh] de Simpring," who lived in the reign of David I (1124-53). He, with the consent of his son, Peter, gave the church of Simpring (the name is variously spelt and its derivation is conjectural), with the advowson or right of patronage, loft, croft and eighteen acres, to the monks of Kelso. But the destruction of the Abbey records has removed a most valuable source of information as to its subsequent history. One can only say it seems reasonably likely that the ruins now remaining (the east wall and part of the north wall of the chancel) are of a building erected before the end of the thirteenth century, on the site of the church gifted by Hye to Kelso Abbey.

This second church was dedicated on 25th June 1247, exactly 700 years ago, by Bishop David de Bernham of St Andrews, and as early as 1334 the lands of Simprim were divided into three, an arrangement which still exists in altered form at the present day. In charters granted by James II and III in 1459 and 1472 they were bestowed upon the convent of Coldstream, and later in the same century shared the fate of "the two

Swintons and the Bastel" at the hands of the English Army under Gloucester. After the Reformation the estate passed in succession to the Maitlands of Lethington, the Humes of Manderston and "the antient family of Cockburn of Langton." A member of the latter, Sir Archibald Cockburn, who represented Berwickshire in the Scots Parliament, built the High Barn of Simprim, which, with the "byre", was later used regularly at communion seasons as an overflow meeting-place from the church. On the lintel of the barn is inscribed "S. A. C. 1676." Later owners included the Murrays of Elibank and the Marjoribanks of Ladykirk.

It seems surprising that so small a church and community had so long and vigorous an existence hard by the larger church and parish of Swinton, for it was not until 1761 that the two were finally united. In 1699 the Rev. Thomas Boston, who initiated the Session Records, and during his ministry of eight years wrote them out in his own hand, found only 88 persons examinable for admission to communion. In 1755 the population was 143, and by 1834 the village—as distinct from the farm—population had practically disappeared.

If at the end of the seventeenth century Simprim was the smallest parish in Scotland, so also must it have contained the smallest church (I doubt if even the submerged Hawes Water church, with its six pews and dolls-house tower, and the white-washed sanctuary among the woods at Porlock in Somerset could be less in size). The chancel, which held the altar, and the nave, measured 22 and 23 feet in length, and 13 and 16 feet in width. There were two doorways, one into the chancel, and the other into the nave. In 1756 there was built a new steeple, with weathercock, to hold the new bell. The latter, made in London, weighed 45½ lbs., and its cost, plus that of installation, came to £4, 4s. 7d. sterling! After the union with Swinton this bell found a home at Swinton House, and was afterwards presented to Christ Church, Duns, where it still is. On Boston's arrival at Simprim the manse was in a ruinous state, and he had to lodge in a house near by. A door from his new manse, later again rebuilt and now a gamekeeper's house, is reputed to be in the present building.

The Session Records, already referred to, are, of course, in one sense unique, but in another merely typical of any obscure

Scottish country parish of the period, reflecting at long range such outside events as the victorious campaigns of Marlborough and the unrest of the Fifteen and the Forty-five. While the cost of living was absurdly low, there was much illiteracy, much avoidable poverty and disease, and, in the absence of insurance, much irreparable loss of property. Yet in spite of the calls of purely local charity, the casual and the vagrant were seldom forgotten: twelve shillings is paid out to "one distrest by the Frenchies," and six shillings to "two broken sojers." In February 1705 there is a large purchase of communion tokens, some of which are extant, and precise details are given of the charges for hire of two mortcloths within and without the parish, and of a hearse acquired about 1730.

Crime ranges from drunkenness (sometimes at "Penny Weddings"), theft and slander, to youthful restlessness in church, and there is a particularly interesting entry on 18th December 1701, when John Leigh (or Lee), then blacksmith in Simprim, was appointed Session Baillie, an office equivalent to a magistracy in parishes where no official such as a sheriff existed. This Session Baillie was empowered to "hold courts for suppressing, preventing and punishing vice and immorality . . . and to fine those who shall be convict and to punish according to law." His creation may have saved the Session many awkward decisions, but there are unfortunately no records of his findings, or of his jurisdiction *vis-à-vis* the higher ecclesiastical and ordinary civil authorities.

The first mention of a celebration of Holy Communion at Simprim appears on 19th July 1702, after an interval of nine years, when the Session Clerk is instructed to take the names of intending communicants, and to prepare a communion roll. Four local ministers assisted Rev. M. Boston at the celebration, and one sermon was preached on the Saturday, six on the Sunday, and two on the Monday, Thanksgiving Day. In accordance with the practice of the time, tables were set up and used, and as the congregation had, from their numbers, to sit down in relays, several ministers were required to officiate for the various groups. In consequence, the ordinary Sunday service, or at least sermon, might be suspended while the minister of the parish supported his colleagues at a distance at Simprim. In the making up of the communion roll it was found

necessary, on at least one occasion, to debar certain members of the congregation from admission because on public examination they were found to be "grossly ignorant." Following on a decree of Presbytery of 20th March 1705 the celebration took place biennially. In 1745 there is a payment of £1, 14s. made to "the precentor in the tent," showing that, during the summer months at any rate, the service was held in the open.

In addition to Boston, who was a prolific writer on religious subjects and the author of a book of "Memoirs" (a tablet to his memory was unveiled in the east gable of the united church in 1899), we may notice in passing Rev. James Landreth (1725-56), who established at Simprim the first, or one of the first, Sunday schools in Scotland; and his successor Rev. John Jolly (1757-66), who *may* have started a "singing school" or "choir" (the entry in the Kirk Session accounts is, taken by itself, ambiguous). If he did, it was his swan-song!

But Simprim has one very special claim on the regard of all members of the Berwickshire Naturalists' Club. It was the birthplace of Dr George Johnston, the conchologist, our pious founder and first President, and the only outstanding figure that this curious vanished Auburn appears to have produced.

ELSDEN

By C. H. HUNTER BLAIR, M.A., D.Litt., F.S.A.

I.—THE CHURCH.¹

THE parish church of Elsdén is dedicated to St Cuthbert, but it must not be supposed that this dedication goes back to the ninth century, or that it was one of the resting-places of the monks, carrying St Cuthbert's body, during their wanderings after their flight from the pillaging Danes at Lindisfarne.

The earliest church of which any remains now exist dates in the early half of the twelfth century, and no indications of an earlier building have been found.

Two transitional Norman pilasters at the west ends of the later arcades and two small windows in the west wall are the only visible remains of this church. The present church, except for considerable restoration in the nineteenth century, is a rebuilding of the later fourteenth century. It consists of a nave, with five bold arcades, having narrow aisles prolonged into the transepts, and a chancel of nearly the same length as the nave. Three decorated windows on its north side, the *sedilia* and a *piscina*, are of this date, as well as the cuspings and tracery of the beautiful east window, whose lower part is however, apparently, a restoration of 1875.

The north transept is called "Anderson's porch," the south "Hedley's," after old Redesdale families. There are tablets on the north wall of the chancel in memory of Ellerington Reed of Troughend, William Brown of Ravenscleugh, Edward Hall of Whitelee and Charles Howard of Overacres. There are also numerous medieval tomb slabs, to unnamed and forgotten people, standing against the wall of the north transept, all of which are carved with varying cruciform shapes. A more ambitious stone bears the roughly incised figure of a man-at-

¹ Plate V, fig. 1.



FIG. 1.—ELSDEN CHURCH FROM THE SOUTH-WEST.



FIG. 2.—ELSDEN TOWER FROM THE SOUTH.



arms carrying a sword and a shield bearing the armorials of a chevron between three birds, probably for one of the numerous Hedley clan. A Roman tombstone dedicated by Julia Lucilla to her husband stands against the north-westerly pillar of the nave. In a small chamber above the bell turret three skeleton horses' heads were found in 1875: it is probable that they were placed there with the idea of increasing the resonance of the single bell.

The chancel has recently been repaved with local stone, and the church is kept in good order and repair. It has been spared the crude, thickly painted, gaudy "religious" windows, which so dim and darken less fortunate churches; it is cheerful and full of light; the peaceful green hills amongst which it stands can happily be seen through its clear windows.

II.—THE TOWER.¹

This fortified tower was probably built in the latter half of the fourteenth century; it is first mentioned in a list of the castles and fortalices of Northumberland of A.D. 1415, contained in MS. Harleian 309, fo. 202.² It is there called *Turris de Ellysdén* and belonged to the *Rector ejusdem*. It is one of the best preserved of the so-called pele-towers of Northumberland and has always been the dwelling-place of the rectors of Elsdén; it was in all probability built for that purpose, like the similar towers at Corbridge, Ponteland and Embleton. The first two



of these are now ruinous and derelict; the last, though added to and much altered, still remains the home of the vicars of Embleton. Such strong places of refuge and towers of strength were very necessary in the marches against Scotland in those troublous times. An armorial panel (inset) in the south front, apparently a later insertion, bears the armorials of Sir Robert of Umfraville, K.G., admiral of England, lord of Redesdale (1421–36). The shield is blazoned *gules crusilly and a cinquefoil or*. The mantled helm is supported at each side by a wolf holding

¹ Plate V, fig. 2.

² *Arch. Ael.*, 2nd series, xiv, p. 19.

a sword, the crest is a cinquefoil as in the arms. Beneath the shield, in large black-letter script, is carved "*R D d rede*" (*Robert dominus de Rede*). The wolves supporters with swords would seem clearly to refer to the forged charter of the Conqueror dated 1076, which purported to grant to Robert "with the beard" "the lordship, vale and forest of Redesdale . . . by the service of defending the same from enemies and wolves for ever with the sword we had by our side when we entered Northumberland." This charter has been proved to be a gross forgery,¹ but it is interesting to note that it was evidently believed in the early half of the fifteenth century, by Sir Robert of Umfraville.² On the east wall is a shield (inset) bearing a deeply indented fess, probably the early shield of the Percys, blazoned *azure a fess engrailed or*. High upon the north wall is the armorial shield of the Howards of Overacres (see *post*, p. 47). In the entrance hall are various badges of the Percys, modelled in plaster. The original barrel-vaulted basement is now used as a sitting-room, and the whole interior of the tower has been altered and brought into harmony with modern ideas of a dwelling-house. An extensive view of the surrounding country can be seen from the battlemented roof.



III.—THE "MOTE HILLS." 3

The liberty of Redesdale included the valley of Rede Water from its source on the Scottish border to its junction with North Tyne at Redesmouth. It also comprised those parts of Upper Coquetdale which lie east of that river between Windyhaugh and Hepple. This extensive franchise was granted in the late eleventh century, either by the Conqueror or by Rufus, to Robert of Umfraville, nicknamed "with the beard" (*cum barba*). It was to be held in serjeanty by the service of guarding the valley from robbers, as stated by Richard of Umfraville at the inquest of A.D. 1212.⁴

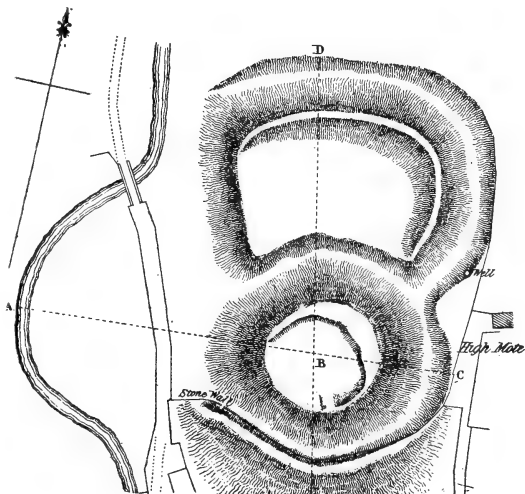
¹ *Peerage and Pedigree*, Round I, 297.

² His seal of 1432 bears the same shield, supporters and crest (*Arch. Ael.*, 3rd series, xxi, 161).

³ Plan reproduced from *Ber. Nat. Club History*, ix, 538.

⁴ *Book of Fees*, i, 201.

These "mote hills" are situated on the east bank of Elsdén Burn, where the narrow valley in the high moorlands of its upper course broadens out to Redesdale and to Elsdén's spacious village green. They are not related in any way either to a British Bronze Age camp, a Roman fort, or a Saxon moot, but are a typical example, the best in Northumberland, of an early Norman castle of the usual "mound and bailey" type. In all



MAP OF THE MOTE HILLS, ELSDEN.

probability they represent the "castle" built by Robert of Umfraville as the head of his liberty soon after he had received the grant.

The smaller and higher hill to the south is partly artificial, with scarped sides to make it more precipitous, and represents the "motte," or mound. Its top, surrounded by an earthen rampart, was originally level, but has been much disturbed in later years by diggers seeking hidden treasure. It is cut off from the adjoining bailey by a broad, deep ditch, and a like

KEY TO PLATE VI.

1. [VENERVNT] AD DOL : ET : CONAN : FVGA V[ERTIT].

Duke William and Harold come to Dol and Conan flees.

Stepped bridge over inner ditch supported by a column, gateway at top, tower on top of mound. Normans are attacking up stairway and earl Conan escapes down a rope.

2. [HIC W]ILLELM VENIT : BAGIAS.

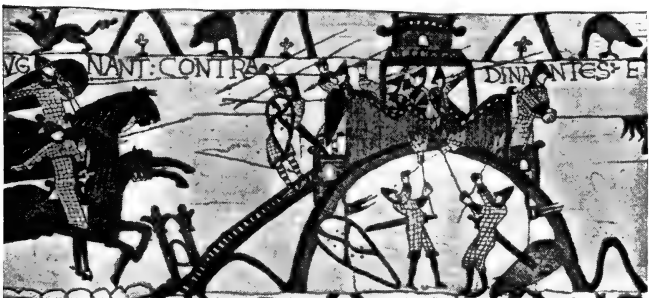
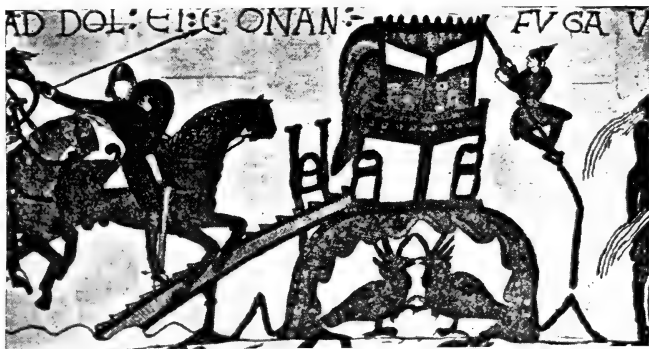
William comes to Bayeux.

Duke William, on horseback, with spear and shield, about to ride up the stepped bridge to the gateway at the top. Tower with cupola on top of the mound is surrounded by a stockade of wood; two conventional birds shown on front of the mound.

3. [HIC : MILITES : WILLELMI : DVCIS : P]VGNANT : CONTRA : DINANTES : ET.

The knights of duke William fight against Dinant and [Conan].

Knights with spears and shields charging the gate of the stairway over the inner ditch and counterscarp; defending knights with spears and shields fight from the upper gateway or inside the stockade; two of William's knights set fire to the wooden stockade. On the right earl Conan surrenders the keys of the castle on the end of his spear with pennon.



MOUND AND BAILEY CASTLES, FROM BAYEUX TAPESTRY



ditch on the east and south separates it from the adjacent land; the steepness of the hill on the west makes such a defence there unnecessary. The lower hill to the north, the bailey of the castle, is about thirty feet lower and contains an area of about half an acre. Its surface is almost level, and its top is, apparently, the original surface of the hill. It also is surrounded by high and wide earthen ramparts on all sides except the west. The defences of timber by which these hills were crowned have disappeared, but from contemporary descriptions of similar castles it is not difficult to reconstruct them.¹ The counterscarps of the outer ditches were defended by *chevaux de frise*, possibly of the nature of quickset hedges, the equivalent of modern barbed wire, whilst the ramparts of the bailey were crowned with a stout stockade of timber. The ditch dividing the bailey from the mound was crossed by a wooden bridge resting upon one or more columns, and with cross bars or steps upon it to enable mounted men to use it. This was protected at top and bottom by a strongly defended gateway. The top of the mound was also stockaded, enclosing the tower house or dwelling-place of the lord, his family and personal servants. The latter was often of elaborate construction, with numerous rooms in as many as two storeys and with basement cellars. The entrance gate to the bailey was sometimes from the first, of stone, but no remains of such a gateway are at Elsdén, where it, probably on the east side, was also of wood (plate VI, Key, p. 44).

In 1157 Henry II dispossessed the earls of the royal house of Scotland of their earldom of Northumberland, and the need to guard the ways through the Cheviots into Coquetdale from Scotland became urgent. The king therefore ordered Odinel of Umfraville, son of Robert II, to build a castle at Harbottle, assisted by the whole company of Northumberland and of the bishopric of Durham.² This castle was built on the south bank of Coquet, where the narrow valley of its upper course widens out into a broad fertile valley, stretching northwards to the

¹ Mrs Armitage in her book *Early Norman Castles in the British Isles*, p. 89, quotes a description of that at Ardres built about 1117. Laurence, prior of Durham, describes in verse that at Durham in Stephen's reign (*Surtees Soc. Publications*, xx, pp. 11-13. See also plate VI, p. 44).

² *Henry III, Letters, etc.*, Rolls ed, i, 131.

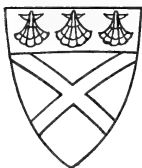
vale of Whittingham and eastwards to the sea at Warkworth. Henry I (1100–35) had early in the twelfth century granted the barony of Prudhoe to Robert II of Umfraville, and a strong castle soon arose there on the south bank of Tyne. The building of these Umfraville strongholds made their small and remote castle at Elsdén superfluous; it was therefore dismantled and abandoned, probably shortly after 1157.

No stone fortification had been added to it, as happened to the similar mound and bailey castles at Wark, Alnwick and Warkworth, where stone keeps, towers and curtain walls replaced the original earthwork and timber fortifications. So Elsdén remains now a typical and unspoilt example of the earthworks of an early Norman castle.

IV.—ARMORIALS OF THE LORDS OF REDESDALE AND OF THE MANOR OF ELSDEN.



Umfraville.—c. 1085–1436.
Gules crusilly and a cinquefoil or.



Taylboys.—1421–1541.
Argent a saltire gules on a chief gules three escallops argent.



Wimbysh.—1541–46.
Purpure a lion rampant argent.

In the Crown—1546–1604.

George Hume, Earl of Dunbar.—1604–11.
Vert a lion rampant argent.



Howards, Earls of Suffolk, afterwards of Croglin and finally of Overacres.—1613–1750.

Gules on a bend between six crosses crosslet fitchly argent an escutcheon or charged with a demi-lion rampant pierced through the mouth by an arrow within the Scottish tressure gules.



Percys, Dukes of Northumberland.—1750.

I and IV, or a lion rampant azure; II and III, gules three luces argent.

CORRESPONDENCE REGARDING BURIAL- PLACE AT BEE EDGE FARM, COLDINGHAM

Two graves were uncovered during ploughing operations on or about 12th October 1947 by Mr Thomas Edgar, tenant of Bee Edge Farm, Coldingham. They lie east and west at the top of a slight knoll in the middle of the "North-East-Ten-Acre field, almost due south of Temple Hall cross-roads. In the first case a large stone (the cover), about six inches thick, was broken, and a sand-filled cavity discovered. Nothing was found in either grave, and from his experience of burying sheep the farmer opined correctly the soil (sandy loam) would not preserve bones for any length of time. Reports were made by Mr H. H. Cowan, Secretary of the Club, and Mr J. A. Thomson, F.F.A., Coldingham, who examined the site, to Mr Stevenson, Keeper of the National Museum of Antiquities of Scotland, and the following are excerpts from his replies received by these gentlemen under date 27th and 30th October.

(a) *To Mr Thomson :*

"Thank you very much for your further information regarding burials near Coldingham. From your description and from the information regarding the first burial sent me by Mr Cowan, I feel sure you are right in considering the two finds to be slab cists of the earlier part of the Bronze Age, of the type described as you say by Mr Craw.¹ As there are, however, no fragments of pottery or any beads or stone tools associated with the graves, I do not think that any useful purpose would be served by my visiting the site. Without grave goods it is never possible to be very specific regarding such burials. In the sandy soil in which they are so often found the bones themselves have long ago disintegrated, as Mr Cowan pointed out.

¹ *Ber. Nat. Club History*, vol. xxiv: Presidential Address by Mr Hewat Craw, F.S.A.Scot.

"I am having the fragments of stone sent to me by Mr Cowan examined by the Geological Survey. I expect that Mr Cowan will want to have such information as one can get about the site recorded in your Club's history.

"Please let me know if anything further turns up."

(b) *To Mr Cowan:*

"I submitted the fragments of stone which you kindly sent to Mr Eckford, of the Geological Survey. Most of the fragments were of Old Red Sandstone, and he pointed out that, parallel to the distinct line of one fragment, there were a number of other striations. Quite what had caused the lines I am unable to say, but it seemed unlikely that they were deliberately man-made—possibly they were glacial striæ. The sliver from the cist wall Mr Eckford identified as a piece of greywacke."

In a letter to Mr Cowan, dated 3rd November, Mr Thomson mentions that he gave Mr Edgar the gist of the official letter (a), saying that he could now remove the slabs when he wanted to proceed with his work in the field. To stimulate further his antiquarian zeal, Mr Thomson presented him with a copy of Mr Craw's Presidential Address already referred to.

NOTE ON OLD VILLAGE CROSS AT PAXTON

THE attention of the Club was first drawn to the wanton demolition of "the Old Village Cross" in a letter from a member, Miss J. E. Robertson, Cawderstanes, Berwick, to Mr Cowan, dated 1st December 1947. She stated that the matter was already in the hands of the police, and that Mr John Cummins, the local county councillor, wished expert advice on the legal position, *i.e.* assuming it to be an Ancient Monument. Correspondence with Mr Cummins and the Inspectorate of Ancient Monuments elicited that that was not the case, and further, that the Cross being on ground for long the property of the Berwick Breweries Company, that body was entitled to do as it liked with it. Mr Cummins wrote to Mr Cowan that he had seen an official of the Company, who regretted sincerely the action of their tenant, the lessee of the Crown Inn, of which they had no knowledge, and at a meeting at Ayton on 11th December the East District Council agreed unanimously to record its public disapproval of the outrage. The Cross is thought originally to have stood on the village green, whence it was removed to its position outside the hotel when a former laird of Paxton built a wall around the green before converting it into an orchard.

The photograph of the Cross reproduced here is from an enlargement made by Mr Cummins and presented by him to the Club, in token of their "kindly interest in this unfortunate business."



OLD VILLAGE CROSS, CROSS HOTEL, PAXTON.

[To face p. 50.]

ORNITHOLOGICAL AND OTHER NOTES

(a) By Lieutenant-Colonel W. M. LOGAN HOME, Duns.

Ornithology.

1947.

- June 30. Blackcap (♂) seen, feeding young.
July 8. Blackcap (♀) seen, joining her mate at feeding, in Edrom policies.
July 5 and 6. Redstarts, pair of, feeding 4 young ones, in Edrom policies.
June 20 and July 21. Colony of Tree-sparrows seen in big silver fir on Edrom Drive. Two nests.
June 27. Colony of 5 pairs of Sedge Warblers seen in thicket along river (Whiteadder).
Aug. 11 and 14. Party of 5 Willow Tits seen insect-hunting in trees on the river bank, behind Edrom House.
Sept. 3. The following curious mixed flocks of birds seen sitting about on the shingle of the Whiteadder behind Edrom House: 1 Heron, 40 Peewits, 20 Black-headed Gulls, 1 Herring Gull, 2 Common Gulls, 1 Snipe, 6 Water-hens, 2 Stock-doves, 3 Wood-pigeons; also about 30 Rooks and Jackdaws. A few yards down from this mixed company, a solitary Dipper was observed running about on stones in the water.

Entomology.

1947.

- May 9. First Red Admiral seen.
„ 28. First Humming-bird Hawk-moth seen; several others seen at intervals between 28th May and 15th Sept.
Oct. 21. Last Red Admiral seen on Michaelmas daisies.
June 9. First Painted Lady (*V. cardui*) seen.
Sept. 8. Last Painted Lady (*V. cardui*) seen.

“I saw a fine specimen of the Wood Tiger moth (*P. Plantaginis*) on the heather near Fast Castle on 7th July. I don't know whether it is rare in Berwickshire; I see it has been recorded from East Lothian in 1930, but without locality or dates.

According to Mr Craw's Index of 1931 it was seen in 1890, just out of the cocoon, at Lorbottle Moor; in 1900 at Black Heddon Ridge; in 1925 at Ross, Bamburgh, Harbottle, Ayton, Lauderdale, Abbey St Bathans, Hawick, Yetholm, etc.

Also in July, a moth found on Whitsome Moor with a query that it be identified was received from the Headmaster, Whitsome School. A reproduction print of the Tiger Moth fitted the specimen.

Clouded Yellow Butterfly.—A less common butterfly which has arrived in this country this year is the 'Clouded Yellow' (*Colias croceus*). I have seen one only in Berwickshire, at Abbey St Bathans, on 30th August. Lord Dunglass reported seeing one in West Lothian in the *Scotsman*; his letter evoked replies from several people who claimed having seen them. I think Edward D. Home said he saw one near Coldstream. These butterflies are immigrants from the Continent every year, and this year they have been unusually abundant. I saw four or five on my way north in my car yesterday."

(b) By Mr A. M. PORTEOUS, Coldstream.

Date and Name.	Seen at/by.	Reported by/Remarks.
1946. Dec. Harrier (prob. Hen).	Near Norham. By Mr Crawhall.	By Major Briggs, Tor Cottage.
Dec. 31. Peregrine Falcon.	Near Fireburnmill. By Lord Dunglass.	By Mr W. Logan, Coldstream; it had been feeding on a dead hare.
Dec. 31. Harrier (prob. Hen).	By Mrs Elliot, Attonburn.	This bird remained at A. for several days, and was seen at times "following the plough."
1947. Jan. (early). Red-necked Grebe	On Tweed at Coldstream. By Mr Porteous.	
Jan. (early). Bittern and 2 Water-rails.	On Anna at Kelso.	By Mr R. Steel. A Bittern was subsequently captured up Teviot, but died after a few days' captivity.

Date and Name.	Seen at/by.	Reported by/Remarks.
Jan. 19. 3 Whooper Swans, 2 Grey Wagtails and numbers of Wigeon, Golden- eye, Goosander, and Redshanks.	From Lees Grounds. By Mr Porteous.	
Jan. 20. Peregrine Falcon.	By Mr Porteous.	Flew over Duns.
Jan. 23. Cormorant.	On Lees Water. By Mr Porteous.	
Jan. 27. Grey Wagtail.	At Coldstream. By Mr Porteous.	
Feb. 6. Common Scoter.	On Tweed at Coldstream. By Mr Porteous.	
Feb. 17. Red-throated Diver.	On small pool in Northfield Grounds, St Abbs. By Mr R. B. Bell.	Mr Bell also reports Chough seen in his grounds in late autumn 1944.
Feb. 27. Peregrine (male).	..	Shot on Floors Estate.
Mar. 21. Wood-pigeon.	At Easter Softlaw, Kelso. By Mr Porteous.	Almost complete "Albino," succumbed to the ex- treme storm: handed in by Mr J. S. Watson.
Apr. 5. Black-throated Diver.	On Lees Water for several days. By Mr Porteous.	Still in winter plumage.
Apr. 26. Harrier (hen, or Montagu-male)	By Dr Henderson, Coldstream.	Flew over Coldstream.
May (late) Black Kite.	Shot near Belford.	This, the fourth record for the British Isles, was identified at Hancock Museum, Newcastle-on- Tyne.
June 26. Turtle-doves nested.	In Cornhill Grounds. By Capt. J. C. Collingwood of Cornhill.	Nest was unfortunately harried.
June 26. Turtle-doves nested.	At Kylloe.	By H. Hogg, West Kylloe.

Date and Name.	Seen at/by.	Reported by/Remarks.
June 26. Goosander and young.	On Temple Pool, Lees. By Mr Porteous.	The ducklings were very small and must have been hatched near by. This bird has extended its breeding range southward in the last few decades.
July. Lesser Redpoll nested.	In Dr J. Henderson's garden, Hawthorns, Coldstream.	A small colony of three or four pairs.
Sept. 1-2. Common Buzzard (aged).	Shot at Newton Don.	By Rev. W. McCallum, Makerstoun.
Aug./Sept. Quail.	Both sides of the Border. By Mr Porteous.	It appears that clutches were hatched out near Gordon, Duns, Cornhill and Kyles. In all, four birds were handed in to me, two were old and two young birds.
Oct. 17. 3 Whooper Swans.	On Birgham Water. By Mr Porteous.	
Dec. 4. 4 Whooper Swans.	On Lees Water. By Mr Porteous.	
Dec. 16. Water-rail.	At E. Learmouth.	By Mr D. G. Brown.
Spring. Great Grey Shrike.	Gordon Area. By Mr M. Glendinning, The Sneepe, Mellerstain.	Picked up dead at time of the storm.
Spring. Quail.	Gordon area. By Mr M. Glendinning.	Occurrence of Quail in Gordon area confirmed by Mr Glendinning.
Aug. Large Elephant Hawk-moth. Four larva.	Coldstream. By Mr Porteous.	
Sept. (late). Humming-bird Hawk-moths.	Coldstream and Cornhill. By Mr Porteous.	One handed to him.

Addendum for *History*, vol. xxx, Part 3, page 252, *re* entry July 1944, Spurge Hawk-moth: "As this moth is so extremely rare in Britain it should be mentioned that identification (unconfirmed by any museum authorities) was made from coloured plate only and the insect was then released. Should identification be correct, it is likely that the moth had been artificially reared from eggs or larva brought over from the Continent."

(c) By Mr H. H. COWAN, Lauder (seen at The Roan).

1947.

Feb. 12. Black Redstart (female).

Mar. 5. Spotted Tree-creeper.

„ 12. Brown Owl. The bird was caught in an outhouse in a weak state and it died later in spite of being fed. Owing to the storms, its source of food (mice) stayed under the snow (ciné photo).

April 3. Brambling (male).

May 4 and June 16. Whitethroat (pair). Their nest in the slit of a beech-tree was ciné-d, showing young birds.

June 27. Coal-tits ciné-d leaving their nest-box.

July. Black Redstart (female).

Aug. 7. Black Redstart (baby), caught in greenhouse (nest not found).

Whitethroats, second nest (ciné), showing eggs.

April 17. Bumblebee on flowers.

Aug. 10. Flying-ants: nuptial flight: thousands.

„ 12. Flying-ants: nuptial flight: hundreds (ciné).

Sept. 15. Humming-bird Hawk-moth (*M. Stellatarum*).

Silver "Y"-moth (*Plusia Gamma*).

Note by Lt.-Col. W. M. Logan Home as to Humming-bird Hawk-moth and Silver "Y"-moth: "The former is not very common in Berwickshire, though I usually see two or three each year. This year, however, it has been seen all over the country. The first I saw here (Edrom) was on 28th May and the last on 11th September. Both are immigrants. The latter is usually very common, and last year swarmed over southern England, but curiously enough this year it has not been so common. I

expect the food plant of its larva has been dried up in the drought.

In Switzerland the Humming-bird Hawk-moth swarmed everywhere, entering the railway carriages at stations and hovering over window-boxes in the streets. I counted twenty-seven of them hovering over a small patch of 'hawkweed' in the corner of a field."

REPORT ON MEETING OF BRITISH ASSOCIATION AT DUNDEE

By Mrs J. BISHOP.

THE first post-war meeting of the British Association which began in Dundee on 27th August 1947 was actually a resumption of the meeting begun in the city and interrupted, on its third day, by the outbreak of hostilities in September 1939. In the old days when my husband used to attend the British Association as your delegate I so often heard him say, "One longs for a dual personality at a time like this. It would be a boon if one could be in two places at the same time!" I agree entirely with his sentiment: there is so much to be seen and heard. I was amused by an article I read in one of the local papers, entitled, "A Layman Sees." He wrote: "The trouble about this British Association business is making up one's mind what you want to hear. There is such a variety of subjects to pick from that, as an ordinary layman, a bit self-conscious of my lack of knowledge among such an array of the country's finest brains, I thought the pin method would be the best way to solve my problem. Firmly closing both eyes I stabbed with my pin, right in the middle of 'Section A.'" He found, unfortunately, that too many people, with or without pins, had reached the same conclusion and that "Section A" (Mathematics and Physics) was about as difficult to get into as a cinema in Dundee on a wet Saturday night.

The first discussion happened to be on "The Peace-time Application of Nuclear Fission," so it seemed everyone was interested in what the atom can do for us. Half an hour before the discussion was due to start, a bevy of young students formed the advance guard of the rush, and twenty minutes later all the available seating space (120) was occupied. Still they piled in—sitting on the steps of the tiered classroom, standing round the walls, filling the small gallery above the speaker's head. Professor Cockcroft, C.B.E., F.R.S., introduced the subject: others taking part were Dr O. R. Frisch: "The Fission

Pile as a Research Instrument"; and Mr W. G. Marley: "The Production of Radioactive Isotopes."

The Presidential Address of Section A was delivered next morning, at 10 A.M., by Sir Edward Appleton, K.C.B., C.B.E., F.R.S., on "Earth, Stars, and Radio." I was fortunate enough to meet that fine gentleman and his charming wife tripping round Keiller's factory, among cakes, Christmas puddings, and marmalade. I did not know who they were, but very much enjoyed the pleasant intercourse.

I did not adopt the "Pin Method," but carefully studied the programme ere I left home, taking note of the meetings of Sections J (Psychology) and L (Education), which I hoped to attend. I faithfully attended both sections, the Presidents of which were known to me: and the meetings were in consequence more interesting. Dr J. S. Philpott's Presidential Address (Psychology) was on "Man's Adaptability," while the President of the Educational Section, Miss Lynda Grier (Oxford), who travelled with our party over South Africa in 1929, spoke on "The Evolution of Secondary Education in England." Sir Garnet Wilson gave a very interesting account of "Education in Scotland." I was amused by an anecdote he related—of former days, surely:

Anxious Parent. "Are ye learning yer Catechism, Peter?"

Peter. "I canna learn it. I dinna like it. I canna understand it."

Anxious Parent. "Ye're no' supposed to understand it. Learn it!"

It was quite impossible to attend one half of the meetings outlined in that extensive programme. Several evening lectures I had to forgo: "Petroleum To-day and To-morrow," by Dr Kirtley F. Mather, Harvard, U.S.A., and "Camouflage," by Dr Hugh B. Cott.

A very important discussion on "The Education of the Man of Science" was held in the Art Galleries. The Chairman and opening speaker was Sir Henry Dale, G.B.E., O.M., F.R.S., President of the Association, and others who took part were: Dr Eric James, Manchester Grammar School; Sir Lawrence Bragg, O.B.E., F.R.S., University of Cambridge; Sir Arthur Fleming, C.B.E., Metropolitan Vickers; and Sir James Irvine, C.B.E., F.R.S., Vice-Chancellor, University of St Andrews.

Sir John Lennard Jones, K.B.E., F.R.S., General Secretary of the Association, summed up the discussion.

Lecturers to children included Professor H. Hartridge, F.R.S., on "Colour," and Sir Richard Paget on "How Men first began to speak."

A morning discussion in the Agricultural Section took place under the title, "Could and Should Britain feed herself?" and an address was given by the Rt. Hon. Walter Elliot, F.R.S., M.P., on "How far can Britain feed herself?" All sounded so interesting.

Three Presidential Addresses, by Professor Winifred Cullis, C.B.E. (Physiology), on "Physiology and the Community"; by Dr J. L. Simonsen, F.R.S. (Chemistry), on "Science and the Colonies"; and by Dr W. G. Ogg (Agriculture), on "Soil and Health," particularly intrigued me, for the lecturers had travelled all over India with me in 1938-39. Alas, these were some of the plums I missed!

On August 27th, at noon, in the Caird Hall, Sir Henry Dale, President of the British Association, received the Freedom of the City in the presence of fully a thousand people. Members and friends, including many famous scientists, assembled to watch the honouring of their chief. Secondary pupils were seated in the organ gallery and the public was welcomed. Lord Provost Powrie and the Magistrates, Sir Henry and Lady Dale and the Dowager Countess of Airlie occupied the platform. The Lord Provost described Sir Henry as one of the most eminent scientists of the present day, whose special field is Physiology. He said: "The country is deeply indebted to Sir Henry for his work in the setting up and guidance of the National Institute of Medical Research; an institute which is world-famous, and has served as a model for other institutes of the kind throughout the world. During the War, Sir Henry's advice and judgment on scientific matters were greatly sought after and respected in Whitehall; and he was a member of the Scientific Advisory Committee in the War Cabinet. There never was a time when friendly International relations between scientists were more important or desirable; and in the task of helping to re-forge the links broken in the War, this country is indeed fortunate in having Sir Henry Dale as a scientist of the first rank." Amid applause, the Lord Provost then handed the silver casket containing the Burgess Ticket to Sir Henry, who, with the Lord Provost and

the Town Clerk (Mr Wm. Borland) looking on, signed his name in the "Lockit Book." Acknowledging the conferment of the Freedom, Sir Henry said he experienced a special warmth of gratitude from the knowledge that the honour which he received in a representative capacity took the form of a Freedom, for, if there was any place in Britain for which a claim could be made for pre-eminence on account of the staunchness with which its sons had stood and fought in defence of freedom, it might well be the City of Dundee, with its neighbouring districts and townships. He went on: "Not always have you welcomed Englishmen here, still less invited them to share your freedom. For blood-stained centuries, indeed, it was to achieve and defend their freedom from English conquerors and invaders that your men went out to fight and die."

Another most interesting ceremony, at which I was privileged to be present, was the capping of five members of the British Association in the Marryat Hall, by Principal Sir James Irvine. These great scientists were: Sir Edward Appleton, Secretary of the Department of Scientific and Industrial Research; Sir Lawrence Bragg, Cavendish Professor of Experimental Physics, Cambridge; Sir Henry Dale, President of the British Association; Sir Alexander Fleming, F.R.S., Professor of Bacteriology, University of London; and Emeritus Professor Angus R. Fulton, Former Principal of University College, Dundee. They were capped with John Knox's Cap. The Graduation Ceremony took place on 29th August at 3 p.m., and was well attended by students and members.

The Inaugural General Meeting took place in the Caird Hall, City Square, on Wednesday evening, 27th August, at 8.30, when Sir Henry Dale delivered his Presidential Address on "Science in War and Peace." The great hall was filled to capacity, and a record membership of 3000 was announced. As Sir Henry Dale walked to his place on the platform, to the strains of "Up wi' the Bonnets o' Bonnie Dundee," played on the great organ by the city organist, Mr James Hinchcliffe, the audience rose to its feet. The theme of the meeting, "Swords into Ploughshares," was the wise decision of the Council. In his address Sir Henry appealed for freedom for science; the liberation of scientists from the entanglements of the abnormal conditions of the war years, and particularly from the secrecy

which they accepted as an abnormal necessity. Science, he said, found itself facing a situation in which hope and frustration contend. The need to make the world safe and the delay in agreement as to the means of doing so, clogged the wheels of science, which should now be turning freely for the enrichment of knowledge and of human life. He allowed that war had added a stimulus to research, citing, for example, the new discovery of penicillin, by Sir Alexander Fleming (who was present), and research by Britain and the U.S.A. for better remedies than quinine and mépacrine for malaria. He mentioned the atomic bombs of Hiroshima and Nagasaki as representing an immediate visible peak of the belligerent use of science; but said that nobody could suppose them to be the ultimate climax of disastrous achievement if the nations should persist in the desperate project of using further advances of science to prepare in secret each to excel, or to anticipate, others, in perfecting the means of annihilation. Does the world need to be warned, he asked, as to the end of such a policy? If so, scientists must continue, against any reluctance, to proclaim the danger and therewith our hatred of the perversion of science which is involved. Machinery was made for man, not man for machinery.

It gave me joy to see Sir James Irvine, who in 1924 was one of our party crossing Canada, step forward to propose a vote of thanks. He received such an ovation! How his students love him! On his benign countenance still lingers the old, kindly expression. In his pawky, humorous way he indicated there were, perhaps, in this large audience two sets of people: one of which might say, "I knew all that already," and the other, "I did not understand a word of it." At all events, his call for a vote of thanks brought forth a rousing cheer. This meeting would, he thought, go down in history. The world of the future would probably look back and wonder what scientists were doing in such a crisis as the present. The situation was summed up by the President: "Many look askance at science—not understanding. We have to go forward, however, fearing nothing—but error."

Many and varied were the excursions planned to suit all sections. I chose a day in St Andrews on Saturday, 30th August; and attended the Official Church Service at 11 A.M. on the following day, in the Parish Church of Dundee.

METEOROLOGICAL OBSERVATIONS IN BERWICKSHIRE DURING 1946.

Compiled by the Rev. A. E. SWINTON of Swinton, M.A., F.R.Met.S.

Month.	Temperature.		Days with Tem- perature at or below 32°.	Bright Sunshine.			
	Maximum.	Minimum.		Hrs.	Days with Sun.	Hrs.	Days with Sun.
				Hrs.	Days with Sun.	Hrs.	Days with Sun.
January February March April. May. June. July. August September. October November. December.	Whitchester.	Marchmont.	Duns Castle.	Manderston.	Swinton House.	Cowdenknowes.	Whitchester.
	47	48	10	20	19	8	14
	50	54	14	19	21	11	18
	65	67	14	23	22	10	17
	71	72	24	29	31	18	26
	67	68	30	33	33	26	30
	78	79	38	40	38	38	37
	78	80	42	44	43	39	42
	71	74	39	42	39	37	38
	66	68	41	41	41	40	38
	57	60	23	30	28	24	26
	59	65	28	29	31	25	29
46	49	24	26	25	21	22	
Year .	78	80	14	19	19	8	14
January February March April. May. June. July. August September. October November. December.	Whitchester.	Marchmont.	Duns Castle.	Manderston.	Swinton House.	Cowdenknowes.	Whitchester.
	20	21	21	26	21	22	25
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RAINFALL IN BERWICKSHIRE DURING 1946.

Compiled by the Rev. A. E. SWINTON of Swinton, M.A., F.R.Met.S.

Station.	Height above sea-level	St Abb's Head.	Tweedhill.	Coldstream.	Whitchester.	Oxendean (Duns).	Manderston.	Nisbet House.	Swinton House.	Lochton.	Marchmont.	Cowdenknowes.	Duration. Swinton House.	Hours.
Month.														
January	.	1.00	.82	.96	2.00	1.87	1.77	1.93	1.46	1.15	1.93	2.11	23.4	
February	.	.65	.69	.64	1.21	.99	.99	.80	.72	.81	.84	1.08	8.0	
March	.	1.54	1.52	1.53	3.35	2.30	2.35	1.91	1.90	1.69	2.21	1.61	38.5	
April	.	.48	.51	.34	.54	.43	.39	.33	.31	.27	.43	.34	7.9	
May	.	1.96	1.7	.99	1.94	1.50	1.61	1.41	1.30	1.27	1.41	1.42	13.0	
June	.	2.06	2.43	1.56	2.19	1.90	2.06		2.05	1.87	1.44	1.77	17.6	
July	.	2.09	2.53	2.63	2.37	2.27	2.62		2.26	2.85	2.54	2.07	31.4	
August	.	4.85	3.97		5.81	5.69	5.38		5.17	5.70	3.97	3.45	43.8	
September	.	3.56	3.40		3.09	3.23	3.00		3.63	2.61	3.83	3.44	41.3	
October	.	.77	.90		.68	.72	.68		.59	.88	.85	.82	12.0	
November	.	5.56	5.66		7.13	5.94	6.20		4.80	4.04	5.38	5.51	72.0	
December	.	2.61	1.71		3.09	2.23	2.02		1.75	1.15	1.92	1.80	28.6	
Year	.	27.13	25.41		33.46	29.07	29.07		25.94	24.29	26.75	25.42	337.5	



PRESENTED

21 MAR 1952

HISTORY

OF THE

BERWICKSHIRE
NATURALISTS' CLUB

INSTITUTED SEPTEMBER 22, 1831

"MARE ET TELLUS, ET, QUOD TEGIT OMNIA, CÆLUM"

VOL. XXXI. PART II.

1948

Price to Members (extra copies) 7s. 6d.

Price to Non-Members 10s.

EDINBURGH

PRINTED FOR THE CLUB

BY NEILL AND CO. LTD., 212 CAUSEWAYSIDE

1949

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IMPORTANT NOTICE

The Editing Secretary would be grateful to members if they would send all Natural History notes and observations (*i.e.* on Zoology, Ornithology, Entomology and Botany), to Lieutenant-Colonel W. M. Logan Home, Edrom House, Duns, and not to the Secretary or himself. Colonel Logan Home has been co-opted as an additional member of the Council, and appointed chairman of a small committee to deal with these subjects in the first instance. Any observations on other subjects (*e.g.* Archæology and Geology), short of a paper or article, will be received by the Editing Secretary and passed on elsewhere for expert attention. Under no circumstances does he hold himself responsible for the opinions expressed in, or the correctness, historical or scientific, of any full-length paper or article. These will, of course, as hitherto, be submitted to their authors in proof for final revision.

March 1949.



PROCEEDINGS
OF THE
BERWICKSHIRE NATURALISTS' CLUB

A HUNDRED AND FIFTY YEARS OF
NEWSPAPER PRODUCTION.

Address prepared for delivery to the Berwickshire Naturalists' Club at Berwick, 6th October 1948, by the late Major H. R. SMAIL, T.D.

WHEN asked to become President of the Berwickshire Naturalists' Club I naturally began to consider a suitable subject for the Presidential address, a tradition of the Club since earliest times. Newspaper production, which has been the concern of my family for 140 years, influenced me to choose that subject. I realise that while interesting articles have already appeared in the Club *Proceedings* on Border typography, no one has given a place to a survey of newspaper production in the area covered by the Club's activities. Yet this industry has played no mean part in the life of our people for a century and a half. Each centre has had its own local newspaper, faithfully recording all that has gone to make up the life and interest of its community and all the varied changes through that long period. For 117 years

one paper, at least, has faithfully recorded the activities of the Berwickshire Naturalists' Club.

During the period under review there have been many attempts at producing a local newspaper. Some have faded out, but the purpose of this address is to give a survey of those which still survive. In such a survey one cannot fail to be struck by the changed attitude to local news, which now occupies a very much more important place in our local newspapers. In the original issues, over a century ago, these papers were overweighted by international and national news, generally of events which had happened weeks before. What we term local news—the recorded doings of people in the area—is to be found tucked away in odd corners. How different to-day, and what a varied range of happenings has led to this change of attitude!

It would be too involved a story to touch on all these happenings, but among developments which have led to the fuller life enjoyed to-day by the people as a whole, we might give attention for a few minutes to means of transport. We remember that 140 to 150 years ago, and for some years after that, those who wished for news of events outside their own particular area would have to await the arrival of the mail coach. One can picture the scene outside one of the main coaching inns, the crowd gathered to await the arrival of the latest "intelligence," a phrase which has been ousted by the more simple description, "news." Berwick, for instance, did not learn of the Battle of Waterloo until three weeks after it had happened, but when the horses clattered and the wheels of the mail coach rumbled up the High Street, there were scenes of great rejoicing and ringing of bells. When these newspapers first began publication there were efforts being made to speed up the coaches, and the early 'forties of last century saw the gradual development of the railways. In our own area we got the North British Railway in 1846 and the North-Eastern Railway

in 1847, just over 100 years ago. The railways revolutionised transport and brought people together in a way which had not been possible before.

Then we must not forget the improvement to road surfaces. Macadam, who did so much in this direction, died in 1836. Motors were beginning to be fairly common in the 1890's, although until 1896 they were regarded as such dangerous contraptions that it was compulsory under law for a man to walk in front with a red flag. In our own lifetime we have seen the rapid development of other means of travel, and now whole villages visit one another and are interested in matters which concern their neighbours. We are witnessing still more startling developments, and there is a consequent quickening in the pace of life, all this having its influence in a general way and on the development of local newspapers in particular.

But perhaps the greatest factor in development has been education. We realise that 150 years ago few could read or write except in centres of learning, and the general standard of education was not high. By 1844 there were established a sufficient number of "Ragged Schools"—to teach the poorer classes—to justify the formation of the Ragged Schools Union. Indeed the early nineteenth century proved to be a period of continuously increasing interest in education. Under the 1870 Act education became compulsory; under the 1891 Act school fees were in some cases abolished, and many will still be able to recall the passive resistance movement following the 1902 Act, which gave power to levy a rate for education. All such happenings were fully recorded in the local newspapers as events which concerned the life of its readers.

Yet another factor has been the gradual development of progress made in self-government, in the management of our own affairs. The word "reform" dominated the early issues of local newspapers, and indeed led to the starting of the two earliest papers. There was the

Reform Act of 1832, and what a bitter controversy there was on that question! This was followed by the formation of Councils in 1835, which gave to the ordinary man a larger say in his own destiny. It is interesting to note that, following important developments in 1835, local newspapers gave more and more space to local news, recording the doings of Councils, and this has been, and still is, one of the most important duties of the local press. Further developments, mainly connected with health, followed in 1886 and 1890, and in 1894 Rural Councils came into being, all these bodies providing opportunities to the people for taking a hand in their own destinies.

Nor must the claims of sporting activities be overlooked. The 'sixties and 'seventies of last century saw increasing interest in sport, and the pages of the local newspapers recorded and encouraged that interest.

By 1863 there were sufficient soccer clubs in England to warrant the formation of the Football Association, followed in 1873 by a similar Association in Scotland. By 1871 the Rugby code had its own Union, and by 1875 hockey, too, had its own Association. Though the birth of golf in its historic seat at St Andrews dates from 1754, it was not until the 1890's that this game became so popular.

The list of developments is so long that one cannot touch on them more fully. Suffice it to mention in passing, developments in means of communication: the penny post in 1840; the coming of the telegraph from 1820 onwards; of the telephone from 1876 onwards; of electricity from 1831 onwards; of cinemas in our own lifetime; of the marvels of wireless. Nor must the claims of photography, from 1840 onwards, be forgotten. All these factors have led to great changes in outlook, and as they developed so did the local angle of news, for the function of the local newspaper has always been to record the doings of its readers.

There is such an overwhelming flood of international and national news to-day that the national papers cannot possibly find room for items of local news. Consequently the local newspaper has become of ever-increasing importance. It is generally conceded that in an independent attitude and as upholders of the freedom of the Press the local newspapers are always to the fore. While many of them had a political party bias when they started, in every case that has been eliminated, and these papers pride themselves on being fair to all parties. Week in, week out, all through the past 150 years, local papers have gone to press, never missing publication no matter what the difficulties were. At no time were those difficulties greater than during the 1939-45 War, or during the past three years, when the shortage of newsprint brought unprecedented difficulties. Local newspapers are faithful recorders of local happenings, of local thought and opinion, and also moulders of that opinion. And yet how little the reading public know of newspaper production!

An interesting point about the production of our local papers has been the continuous family interest which generation after generation has taken in the business. In no less than four instances there have been three generations of the same family in that business: the Steven family as publishers of *The Berwick Journal*, the Croal family as publishers of *The Haddington Courier*, the Easton family as publishers of *The Jedburgh Gazette*, and the Walker family as publishers of *The Border Telegraph*; while *The Berwick Advertiser* has been in the hands of six succeeding generations of the same family (see note at the end of the address).

And now must follow, in order of publication, notes on the local newspapers still in existence in our area. For these I am indebted to the proprietors and editors of the papers concerned.

The order of publication was as follows:—

<i>The Kelso Chronicle</i>	1783
(publication was, however, suspended in 1803 and resumed in 1832)	
<i>The Kelso Mail</i>	1797
<i>The Berwick Advertiser</i>	1808
<i>The Border Standard</i>	1848
<i>The Southern Reporter</i>	1855
<i>The Berwick Journal</i>	1855
<i>The Haddington Courier</i>	1859
<i>The Berwickshire News</i>	1869
<i>The Jedburgh Gazette</i>	1870
<i>The Berwickshire Advertiser</i>	1893
<i>The Border Telegraph</i>	1896

The Kelso Mail (1797).

Few papers in Scotland can claim 150 years of unbroken publication. Such is the proud record of *The Kelso Mail*, which, when it celebrated its centenary in 1897, listed *The Aberdeen Journal*, *The Glasgow Herald*, and itself as still existing after commencing publication towards the end of the eighteenth century.

Its founder was James Ballantyne, eldest of the three sons of John Ballantyne, who was born in Kelso in 1770. It was while he was attending Kelso Grammar School, around 1783, that he made the acquaintance of Sir Walter Scott, who was on holiday and attended the school for a few hours each day, "to keep up his scholarship."

Ballantyne became articled to a Kelso solicitor, proceeded to Edinburgh to attend the Scots Law class, and returned to Kelso in 1795, establishing himself as a solicitor.

At that time *The British Chronicle* or *Union Gazette* was "the only instrument of universal and genuine intelligence" in the Burgh. It had started in 1783 under James Palmer. Besides being organist at the Episcopal Church, Palmer seems to have held very advanced

political views, and it is said that he suffered imprisonment for the injudicious expression of them in his paper. Certainly he did appear at Jedburgh Court on a charge of having published a seditious libel, but William Davidson Dawson, a celebrated agriculturist, opportunely acknowledged the authorship. The French Revolution was then at its height, and in 1798 the nobility and gentry of the neighbourhood approached James Ballantyne to establish a rival paper. He undertook the whole management, but William Jerdan, Scott's biographer, mentions that for some time he was "aided by Sir Walter Scott." Having purchased his type in Glasgow, he launched the *Mail* as a bi-weekly on 13th April 1797.

Ballantyne, having become Sir Walter Scott's publisher, was prevailed upon by him to move to Edinburgh in 1802, and three years later relinquished the editorship of the *Mail* to his younger brother Alexander, father of R. M. Ballantyne, prime favourite among schoolboys of the Victorian and Edwardian eras. From 1805 to 1825 Alexander conducted the paper with ability and tact. He in turn was succeeded by George Ross in 1826, and the latter in May 1827 by John Hay, who remained till 1828, when William Pringle took his place. In 1836 Pringle was succeeded by John Wares. Next came Alexander Elliot, in whose hands the paper remained on lease till 1861, when it passed to William Jerdan, a descendant of one of the founders. When Jerdan died in 1875, John Smith entered into partnership with John Cuthbert, and in 1880 the former undertook full responsibility as proprietor and conductor, and the *Mail* was converted into a weekly paper.

Smith was proprietor and editor when the paper celebrated its centenary in 1897. With his grey, flowing beard, he was a familiar figure to many of us who know and love Kelso, and he performed his duties with assiduity until his death in 1932, when the *Mail* was

taken over by J. G. Thomson. In 1937 it was sold to E. Whitaker, who in turn sold it to K. Brough in 1944.

The Kelso Chronicle (1783 and 1832).

Though the present *Kelso Chronicle* celebrated its centenary in 1932, the name "Chronicle," as attached to a newspaper, has been known in Kelso and on the Borders for more than one and a half centuries. There was, however, a break of about thirty years in its existence, from 1803 to 1832.

The Kelso Chronicle was started in February 1783, and can therefore claim to be the pioneer of Border newspapers, as it appeared fourteen years before any other provincial newspaper was ever thought of, either in Kelso or on the Borders. The publisher of the original *Kelso Chronicle* in 1783 was James Palmer, who on more than one occasion was sent to Jedburgh gaol for his outspoken criticisms. The *Chronicle* was carried on as long as Palmer lived, and after his death was continued till 1803.

On 16th March 1832 publication was resumed by James Hooper Dawson, a grandson of Palmer, and a member of a well-known farming family in the Wark district. He was a member of the English Bar, but gave up his profession in favour of literary work and made a study of reform. He carried on the business until his death in 1861. From 1832 to 1871 the paper was printed and published at 27 Bowmont Street. For twenty-nine years after this, until 1900, publishing and printing were in separate premises, the publication being done from 20 Wood Market and the printing in premises at the foot of Horse Market, in much the same place as at present. In 1900 John McArthur bought the printing premises of Messrs Rutherford & Craig, who had printed the paper from 1871, and printing and

publishing were once more united under one roof, the present office in Cross Street being enlarged for the purpose.

After Dawson's death in 1861, Andrew Murray, who had started with the *Chronicle* shortly after it was resumed in 1832, carried on the paper until his death in 1868. Mrs Elizabeth Murray carried on until 1871, when the printing was done by Messrs Rutherford & Craig. John McArthur, its editor and publisher since 1900, during the First World War introduced the linotype machine into the works. He retired in February 1931, when the *Chronicle* was purchased by Major Henry Richardson Smail, proprietor of *The Berwick Advertiser*.

It is interesting to note that, before the days of the telephone, McArthur used a pigeon news service for events happening on a Thursday, the day before publication. After a time cats and rats frightened the birds from alighting at the *Chronicle* office, but Messrs Black and Bulman and Frank Scott of the Gas House gave the use of their lofts, and when the birds arrived, the news they brought was rushed to headquarters.

The Berwick Advertiser (1808).

The Berwick Advertiser, or, as it was originally styled, *The British Gazette and Berwick Advertiser*, introduced itself to the world on 2nd January 1808, giving as the modest excuse for its appearance "the extraordinary influx of important intelligence" which had arrived during the past fortnight. One item was the arrival off Dover of a French flag of truce. Yet another was an "important manifesto" by Russia. This was in the period of the Napoleonic wars.

The man who made such a venture into weekly journalism was Henry Richardson, still a comparatively young man of thirty-four. He was born into the printing trade,

his father, William Richardson, having been pressman to John Taylor, another printer in the town. It was from his house in Church Street that the *Advertiser* first saw the light of day. In a few years he moved to Western Lane, where publication continued until the present premises were opened in 1900.

Henry Richardson did not live long; in 1823 he died suddenly from a heart attack, while out on the street, at the age of forty-nine, just fifteen years after he started the *Advertiser*. He left a wife and young family, and the publication continued on their behalf for thirty years, issues bearing the imprint "Catherine Richardson," perhaps one of the first instances in which a woman could lay claim to be in newspaper production. Catherine had been married before she married Henry Richardson, and a son by her first marriage, Andrew Robson, had been born in 1808, the same year as the *Advertiser*. He succeeded his mother as proprietor, and when he died at Rothesay in 1861, it was stated that he had been connected with the *Advertiser* for thirty-six years. He must have gone into the business when a lad of fifteen, and had had considerable experience when he took over in 1853 on his mother's death.

When Andrew Robson died, his stepbrother, Henry Richardson, nine years his junior, became proprietor. He had graduated M.D. at Edinburgh University, and in 1841 entered the Royal Navy, attaining the rank of Fleet-Surgeon before he retired in 1869, eight years after becoming proprietor. For seven years the *Advertiser* was published for Dr Richardson by Alexander Paton, who acted as his manager. In 1868 Paton acquired a business of his own as a bookseller in High Street, and in that year the name of Henry Richardson Smail, a nephew of Dr Richardson, appears in the imprint. He acted as manager and publisher for Dr Richardson until 1885, when on the death of the proprietor Smail took over in that capacity.

Then followed a period of considerable expansion. In the 1890's the linotype machine was introduced, taking the place of hand-setting; in 1893 *The Berwickshire Advertiser* was started, and in 1900 the new premises in Marygate were opened.

Henry Richardson Smail, the elder, died in 1917, while his eldest son, Henry Richardson Smail, the younger, was on active service with the Northumberland Fusiliers in France. For two years, until Major Smail's return in 1919, his cousin, Henry Smail Hamilton, acted as manager and later as editor. Major Smail entered the business ten years before his father's death; in 1931 he also became proprietor of *The Kelso Chronicle*.

Two editors of *The Berwick Advertiser* were outstanding in their day and generation: John Mackay Wilson, author of *Tales of the Border*, and editor from 1832 to 1835, and Alexander Russell, editor from 1839 to 1842. Russell went to Fifeshire and Kilmarnock before going to *The Scotsman* in 1844. He was appointed editor of *The Scotsman* in 1848, exactly 100 years ago, and it was under his guidance that that paper, then a bi-weekly, became a daily paper.

The Border Standard (1848).

The Border Advertiser was first published on 1st January 1848. James Brown was assisted in the business by his son Thomas, who assumed the name of Craig-Brown on his marriage in 1868. He left printing for spinning, and we find the name of McQueen entering the proprietorship in 1873, when the business was acquired by McQueen & Russell. The former was a trained paper merchant, while John Russell was the practical printer and edited the paper. The contract of co-partnership expired in 1878, Russell acquiring the business and the premises, while McQueen set up as

a printer in Channel Street, those premises having been greatly extended since then, largely through specialisation in the manufacture of targets for H.M. Forces and Rifle Clubs. His son, John Stirling McQueen, the present chairman of John McQueen & Son, Ltd., became an apprentice in the business in 1886, a partner in 1902, and sole partner on the death of his father in 1912. To square off the dissolved partnership, the Russell business was bought by David Craighead, and eventually came into the possession of his son David. On his death in 1919 John McQueen & Son acquired its goodwill, thus reuniting the connection severed forty-one years before. In 1927 John McQueen & Son became a private limited liability company.

The Border Advertiser had arisen from the ruins of *The Border Watch*, a Free Church organ originally printed in Kelso and transferred to Gala by William Brockie. After a short time it was taken over by James Brown. *The Border Advertiser* was carried on by Messrs Craighead until July 1906, when the publication ceased and the files were handed to Gala Public Library.

In 1881 there was a call for a second paper in Gala, and McQueen entered into partnership with James Wilson, an authority on Border literary subjects and an antiquarian, and they issued *The Scottish Border Record*. Wilson relinquished the partnership after three years, and it was carried on by the printing firm till January 1906, when it was disposed of to a political company to run in the party interest. It was then that the name was changed to *The Border Standard*, and the firm of McQueen printed it under contract to the company. The political angle was found to be a drag, and the company came to an end voluntarily at the close of 1912, when the firm reacquired proprietorship. Alexander Scott, grandson of James Wilson, became its editor until 1920, when a local journalist, W. Sorley Brown, became proprietor and editor, McQueen's firm

continuing to print it. This arrangement went on until 1942, when Sorley Brown died. *The Border Standard* became *The Border Standard*, Limited, and Messrs Donald McIntosh, J. McQueen and W. Bertram are now directors, with M. M. Gray as Secretary and Donald McIntosh as editor and managing director. All along credit is due to the firm of McQueen for sending their apprentices to Heriot-Watt College, Edinburgh, as part of their training, thereby recognising their responsibility to their own prospective journeymen and to the technical skill of the printing craft in general.

The Southern Reporter (1855).

This paper owes its inception to George Lewis, who came to Selkirk in 1844 as a grocer. Its birth was really due to a gold rush. The local printer was one of the young men of the Burgh who decided to emigrate to Australia, and his only deterrent was the disposal of his plant. Its main component consisted of a wooden press, which, it was said, printed the proclamation of Bonnie Prince Charlie in Edinburgh during the ill-fated '45. Looking askance at first, Lewis was persuaded to purchase by a mutual friend and the pioneering printer. It was apparent that he showed remarkable aptitude in picking up his adopted trade, and the zest of it carried him into bolder ventures.

Selkirk was then a primitive little town and had no news-sheet, its citizens being dependent on the Edinburgh press which came by mail cart. Lewis embarked on the daring adventure of producing a news-sheet, *The Selkirkshire Advertiser*, which made its appearance to the great surprise of the Burgh's eighty electors—a demy-quarto sheet of four pages. Its success led to the publication of *The Southern Reporter* on 6th October 1855. Chief news items were the taking of Sevastopol, and the completion of the Gala-Selkirk railway line. It was first

published as a monthly for a penny, then fortnightly, and a little later as a weekly, with an increase in size. Its circulation was then 500 weekly, and it sold at 2½d., or 3d. stamped.

The removal of the paper duty gave an immense impetus, and shortly after this, in the '70's, the paper was printed on a cylinder machine driven by an engine, thus saving the staff an arduous task.

Lewis, in 1897, took into partnership William Crichton, one of his apprentices, and three and a half years later, on the retirement of the founder, he became sole partner. Lewis passed away in 1907 at the age of eighty, after a strenuous life as proprietor and in the service of the Burgh.

On 1st January 1914 the paper was transferred to the ownership of the late Robert G. Mann, who on his death was succeeded by his son, G. F. Mann. The firm trades under the title of Lewis & Son, Limited.

The Berwick Journal (1855).

Number One of *The Berwick Journal* was issued on 16th June 1855 under the title of *The Illustrated Berwick Journal*. The imprint stated that the paper was printed and published by William Davidson and George Turner. Its price on its foundation was twopence; its transmission by post cost one penny; it was a paper of twelve pages, of three single columns each page. In its first issue these pages had a variety of pictures. It was in 1864 that the late ex-Mayor G. F. Steven became its proprietor, and he was also editor of the paper until his death in 1910, when his son, the late Major Alexander Steven, became proprietor and editor. When he died in 1944 his son, A. C. A. Steven, became editor, being associated with his younger brother, G. F. Steven, in the Company. The Jubilee of the paper was celebrated in 1905, and the Diamond Jubilee in 1915.

The Haddington Courier (1859).

The Haddington Courier, now the only newspaper published in East Lothian, has the somewhat unique distinction of having been in the hands of members of the same family since it was first issued on 20th October 1859. The newspaper was founded by the brothers David and James Croal, who came from Edinburgh to launch what has proved to be a successful journal. For the first issue 600 copies were printed, but the demand for the paper increased, until to-day the weekly "run" has multiplied by over twelve times that number. In the early days the paper was set entirely by hand and printed on a hand-press. But ever ready to adopt modern methods, the proprietors of the *Courier* were among the first newspaper owners to introduce the linotype machine, and this obviated a slow and laborious process. At first one linotype was installed, some years prior to the outbreak of war in 1914, but since then it has been superseded by more modern machines, until now the *Courier* office is one of the best equipped among weekly newspapers in Scotland. Printing processes were also gradually brought up to date and the size of the paper increased.

James Croal died in 1883 and David Croal in 1904, when the ownership of the paper went to James G. Croal, a son of the elder brother. The latter continued the progressive policy started by the founders, and it was he who introduced into the office the first of the Model 4 linotype machines, these being a great improvement on the previous types.

James G. Croal died in 1924, and his daughter, Miss E. M. Croal, now conducts the newspaper in the same enlightened fashion as her forbears.

While *The Haddington Courier* has reported upon many important happenings in East Lothian, nothing has ever proved so serious as to prevent any issue from appearing.

The newspaper came out, though in abridged form, during the period of the General Strike in 1926, and even bombs from German planes on the town on 3rd March 1941 failed to stop production. One of the bombs rained on Haddington that night hit the *Courier* office, but fortunately failed to explode, thus lessening the damage; the newspaper appeared that week as usual. The *Courier* also enjoyed the invidious distinction of being the first, if not the only, Scottish newspaper office to be bombed during the Second World War.

When it set out on its career the *Courier* was a Liberal journal, but since the 1914-18 War it has pursued an independent course.

The Berwickshire News (1869).

It was on Tuesday, 6th July 1869, that ex-Mayor Steven, proprietor and editor of *The Berwick Journal*, five years after he had acquired that paper, published the first issue of *The Berwickshire News* at the then unprecedented price of one penny. It was a modest newspaper of four pages, each of six short columns, published from the office in Market Place, Duns. Many were the predictions that a weekly newspaper at one penny would prove a failure, but along with such prophecies came the reduction of existing threepenny newspapers to twopence, and in another twelve years all the twopenny papers on the Borderland were reduced to the popular penny.

The Jedburgh Gazette (1870).

This weekly newspaper has had the distinction of being owned and published by three generations of the Easton family, all bearing the Christian name of Walter: the founder, from 1870 till his death in 1908; his son, from then until his retirement in 1937, followed by his

death in 1942; and the present proprietor, who took over in 1938 and has consistently endeavoured to maintain the high standard set by his predecessors.

"When I was a young boy," said ex-Provost J. S. Boyd, "I remember being in Market Place when there was a big crowd round the shop which is now Walter Telfer's, where your grandfather (the first Walter Easton) set up in business. They were all waiting for something, and I think—mind, I cannot be absolutely certain, but I *think*—they were waiting for the first *Gazettes* to be brought along from the printing office in Abbey Place.

"That is our sole recollection of hearing anyone talk from first-hand experience of that day," wrote the present proprietor in 1945. The knowledge that its publication has continued in unbroken sequence from that day to this, serving successive generations since then, and striving throughout that long period to be of genuine service to the community, gives cause for some satisfaction.

It was, as already indicated, in 1870 that the first of the Walter Eastons, thinking that there was an opening in the town for a second paper, started the *Gazette*. The *Teviotdale Record* had been begun by his brothers in 1855. He had a heavy struggle against the well-established *Record*, the struggle being magnified by a series of unfortunate mischances resulting in heavy legal expenses, but soon it became evident that the *Gazette* had come to stay. Some two and a half years after publication it increased its size to eight pages, although, in accordance with the practice of the day, four of its pages, containing national news and advertising, were published outside the Burgh, probably in Edinburgh. Then it reverted to four larger pages, with local and district news only, for a period of thirty years, when paper restrictions and the 1914-18 War compelled a smaller size. In 1929, consequent on an increase in the population, due largely to the establishment of the rayon industry, more machinery

was installed, and the size of the paper increased to that prevailing in 1941, when the exigencies of Hitler's war again compelled a temporary reduction. It may be said, however, that the wheel has now turned full circle, for in 1945 the *Gazette* was back to a size closely approximating to the original in 1870.

The Berwickshire Advertiser (1893).

The Berwickshire Advertiser was first issued on 25th July 1893, the intention being to give more space to events in the county of Berwickshire than had been possible in *The Berwick Advertiser*. The publisher was the late H. R. Smail, and the newspaper celebrated its Jubilee in 1943.

The Border Telegraph (1896).

The Border Telegraph, published by A. Walker & Son, Ltd., Galashiels, is the youngest of the Border newspapers, having been first published in November 1896. Perhaps that fact may account to some extent for the enterprise of the publishers in installing many of the latest types of machinery. For instance, the linotype was installed at *The Border Telegraph* office at the same time as at *The Scotsman* office. In fact, every issue of *The Border Telegraph*, since its first publication in November 1896, has had machine-set type. Another interesting fact, too, is that the original operator, E. Eckford, is still in the service of the firm, and has probably set more lines of type than any other person in the world. This operator, too, now presides at an intertype machine, a machine of greater simplicity than the linotype. Other newspaper proprietors, will acknowledge that it is not only in type-setting that *The Border Telegraph* has led the way in the Borders. In the matter of monotype operating and its associated casting the firm have been to a large extent pioneers.

Again, with the development of photography as an essential feature of newspaper production, the proprietors introduced for the first time in the Borders block-making plant, and in this work they have steadily progressed. Similarly they appreciated that the Wharfedale machine as a production unit had been outpaced by modern progress, so installed a type of printing machinery with automatic feeding apparatus before any other firm in the Borders.

The firm was founded by the late Alexander Walker some years before *The Border Telegraph* appeared as a weekly issue. When originally published, the newspaper was known as *The Galashiels Telegraph*, but with the growth of circulation it was not surprising that the title was changed to its present form in October 1902. It is not too much to say that Gala people all over the world would miss *The Border Telegraph* if they did not receive it regularly. The present managing director is also Alexander Walker, a grandson of the founder, and it is to him that credit is due for more recent developments designed to keep pace with modern progress.

Note.—The author, who died on 30th August 1948, has been succeeded in the proprietorship of *The Berwick Advertiser*, *The Berwickshire Advertiser*, and *The Kelso Chronicle* by his cousin, Mr J. I. M. Smail, M.C. Mr Smail has joined the Club, so that the old connection and co-operation will be happily continued. Although she would wish no notice to be taken of her services, tribute must be paid here to Miss Gray, until 1948 the editor of *The Berwick Advertiser*, who has put into final shape the address as it now appears.

Reports of Meetings for the Year 1948.

1. THE first meeting of the year was held on Thursday, 27th May, in weather not unlike that of the first in 1947, cold but dry. The attendance was a record for some years back, exactly 90 members and friends meeting the President at "The Shore." The whole meeting was very successful, thanks to the arrangements made with the officials on Holy Island, and in spite of transport difficulties. Crossing the sands even at low tide was quite an undertaking, but the cars, provided from the island, though they could not be called stylish, were well suited for their work: a driver stated that their "life" was six weeks and upwards.

The first part of the programme was an interesting address by Rev. E. N. O. Gray, Vicar of St Mary's Parish Church, in which he outlined its history, the original buildings being a school and monastery dating back to 635. Mr Gray also gave a general description of the Priory (1093) and the Castle (c. 1550). Various interesting relics were shown, including old prints of the Priory and records of the church, as well as the Register and an ancient chalice.

Close by the church are the ruins of the Priory, where the custodian, Mr Lilburn Yetts, conducted the members round and painted a word-picture of the building's former appearance. At the main entrance two towers had narrow, spiral staircases which allowed only one person on them at a time, and between the towers there had been two look-outs—irrefutable evidence that the Priory had been fortified. The well-kept lawns and flower beds, the colour scheme and the general lay-out, were most impressive. At the entrance gate the Priory museum was visited, which houses a collection of stones and other relics.

In the afternoon members wandered round by "The Ooze" to the Castle, where the family of Mr John Lilburn acted as guides. Though never a remarkable example of architecture, the Castle belongs to a good period, and is a solid, practical building set up for defence. Its character lies in its isolated and romantic situation, 105 feet high, upon the rock of which from a distance it appears to form a part. Seen thus, its appearance is not unlike Mont-Saint-Michel, in Normandy,

where, as here, the tide recedes, leaving the sands passable on foot. The Castle was given to the National Trust in 1944 by Sir Edward de Stein and his sister, and they remain in occupation of it.

Tea was enjoyed at several hotels on the island before the "shandrydans" conveyed members back to "The Shore."

The following new members were elected: Dr R. H. Dewar, Berwick; D. R. Herriot, East Ord; Mrs C. J. Inglis, Ancrum; John Inglis, Ancrum; Mrs M. J. Kippen, Berwick; Mrs J. Mather, Horncliffe; T. A. Newton, Wooler; Miss E. J. Purves, Berwick; J. Stawart, Wooler.

2. The second meeting was held on Wednesday, 23rd June, at the experimental farm of Boghall, Midlothian. Though the attendance left much to be desired in view of the importance of food-growing in the national economy of to-day, yet those who met the President at Boghall were very well rewarded. In two parties, they were conducted over the extensive grounds, and the many experimental plots carrying different food crops were explained fully by two members of the staff. Potatoes, sugar beet, kale, barley, oats, wheat, various grasses, also strawberries, raspberries, currants and other fruits, were dealt with, and methods of liming and manuring, all of considerable interest.

The afternoon was occupied first in a visit to Bush House, which is to be adapted as a centre for agricultural research and education, as well as for forestry. In the surrounding policies there is a great variety of rare shrubs and flowers, as well as magnificent trees, some of them 200 years old.

Driving thence, the members visited Castlelaw, where Mr S. H. Cruden, Assistant Inspector of Ancient Monuments, described the fort and earth-house nearby. The latter seems to belong to the second century A.D., and to have been built to harass users of the Roman roads. Even in those days man went to ground out of the way of his enemy, and the earth-house could, from its appearance, be pictured as a modern air-raid shelter. It was stated that these earth-houses are quite rare south of the Forth.

The following new members were elected: A. J. E. Calder, Duns; Mrs K. Davidson, Beal; Mrs J. Prentice, Duns;

Miss A. H. Robertson, Cawderstanes, Berwick; Rev. A. F. W. Thomas, Berwick.

3. The weather at the third meeting, in spite of its being held on St Swithin's Day, Thursday, 15th July, was up to its usual fine standard. A grey morning turned into a sunny forenoon by the time members collected at the Middle Pier, Granton Harbour, at 11 o'clock. The Forth was dead calm, but a haze prevented the Bridge and the normally fine view of the Fife coast from being seen. Some 43 members with 36 friends met the President on board the M.V. *Royal Forth Lady*, which had been chartered specially for the Club's visit. During the recent war the vessel had been a submarine-chaser, but is now beautifully fitted out with peace-time equipment. Along with members the owner of the ship, Mr John Hall, and his agent, Mr J. S. Tweedie, brought their relations, and the Club was honoured by having Dr J. S. Richardson, Chief Inspector of Ancient Monuments, to conduct them round, assisted by Mr S. H. Cruden.

The meeting commenced by Dr Richardson describing in detail the past history of the Abbey, after which he led half of the company in a circuit of the buildings, Mr Cruden conducting the other half, the attendance having been brought up to over 80 by the addition of a member and friends who had arrived in their own launch from Aberdour. Lunch was taken in various picturesque parts of the Abbey precincts, after which members were free to re-examine the buildings in their own time.

Inchcolm has been called "The Iona of the East," and its early history began in the twelfth century. One of the most interesting points about the buildings is that they constitute the only monastery in Scotland which shows the complete "lay-out."

Royal Forth Lady arrived at the island in the afternoon to take members back to the mainland, and the wisdom of having had a special charter of the ship was very obvious then. The following new members were elected: J. S. Leitch, Longformacus, and Miss S. D. Richardson, Berwick.

4. For the fourth meeting, on Wednesday, 18th August, the early morning was not promising, and, after the deluge of

the week before, hardly encouraging for members to drive the longish route from home. But by noon the sun had come out, and some 40 members and friends by buses from Berwick, and almost as many more in cars, met at Friars' Well Lodge, near Alnwick.

The road from the lodge down to Hulne Priory had been affected by the rainstorm, but in spite of great difficulties the cars were able to negotiate it. The bus-drivers refused to risk it and their passengers walked.

Owing to illness the President was unable to be present, but Rev. A. E. Swinton deputised for him in introducing Mr D. P. Jackson, B.Sc., Alnwick Training College, when members arrived at the Priory.

Starting at the entrance gate, which is set in a high massive wall, Mr Jackson stated that this had been formerly considerably higher and obviously intended for defence, as it had been adorned with battlements and corner turrets, most of which, unfortunately, had disappeared.

In a brief description of the origins of the monastery and its founder, members were told that a young man named Ralph Fresborn, a native of Northumberland, went to the Holy Land with the Earl of Cornwall. There he became acquainted with the friars of Mount Carmel, and was so impressed with their way of life that he decided to enter the monastery. Later, the Lords de Vesey and Gray, both lords of Northumberland, when visiting Mount Carmel, found him and persuaded him to return home. After his arrival, when he had decided to build a monastery, he chose this site near Alnwick because of the great resemblance which the adjoining Brizlee Hill bore to Mount Carmel. After an explanation of the general lay-out of the Priory, members were invited to inspect the details for themselves: the Lord's Tower, built by the 4th Earl of Northumberland in 1488, the Monks' Chapter House, the Strangers' Chapel, the bakehouse, and the remains of the old brewery.

The next part of the programme was a visit to Alnwick Castle, where members were met at the barbican by the eighty-year-old gate porter, Mr J. Byrnes, and conducted round the outer and inner bailey. Amongst other historical points, the draw-well, with the figure of St James blessing it, and the dungeons and cannon used in the Crimean War, were inspected.

The precincts of the Castle cover about five acres, and from the terraces a wide view of the surrounding country can be obtained.

To conclude the day, the Club visited St Michael's Parish Church, which was dedicated to the Archangel and originally to St Mary. Here Dr Hunter Blair gave an interesting description of the building, part of which dates back to the twelfth century. A chapel has been in existence since 1147, but the only recognisable remains are a few stones sculptured with the diaper pattern, built into the wall above the chancel arch. St Michael's was described by the speaker as one of the most picturesque and beautiful churches in Northumberland, and members took the opportunity of admiring the communion plate and other valuables which had been laid out through the kindness of the Vicar, the Rev. Eyton Lloyd.

At the "White Swan," Alnwick, the programme was completed when some 65 members joined the Treasurers and the Secretary at tea, afterwards rejoining their buses and cars.

5. The Annual Business Meeting was held on Wednesday, 6th October, in the King's Arms Hotel, Berwick, when some 50 members were present.

The meeting opened with a statement by the Secretary on behalf of the Council, which outlined the peculiar position of the Club in having no chairman, owing to the death of the President and the resignation of the Vice-President during their terms of office (see Appendix I, p. 93). The appointment by the late President of Mr F. R. N. Curle, Melrose, as President direct, *i.e.* without being first a Vice-President, met with entire approval. The meeting having unanimously approved the Council's nomination of Mr Robert Middlemas, Alnwick, as Vice-President for the coming year, the Secretary invited Mr Middlemas to take the Chair.

In a short speech Mr Middlemas referred to his long connection as a member since 1898. He thanked members for approving his nomination, and said he hoped he would be able to carry out the duties in a manner befitting the office. Though he had attended most of the meetings he had not known the late President personally, and therefore he would ask the Secretary to make some reference to his death, since he knew him more intimately. Before doing so, however, he asked members to

stand, as a mark of respect to the late President. He then called on the Secretary to make reference to his death, which the latter did in the following terms:—

“By the unexpected death of its esteemed President, Major H. R. Smail, on 30th August 1948, the Berwickshire Naturalists' Club has suffered a very great loss, which those who were associated with him intimately will feel still more deeply.

“When the Club met last, in Alnwick, there was no idea in the minds of any one of us that the Major was other than just temporarily ill, although confined to bed. In fact, I received a letter, one of the last he must have written in connection with the Club, saying that the doctor would not allow him to get up yet, and asking me to arrange for a substitute at the meeting.

“Major Smail became a member of the Club in October 1919; he was nominated Vice-President in 1939, and held that office till 1947, when he was appointed President at the Annual Meeting last year. He was always keenly interested in the work of the Club.

“At the funeral service in Berwick Parish Church there was a large congregation of mourners of both sexes, old and young, high and low. The impressive, simple service was conducted by two of our members—the Vicar, Rev. W. B. Hicks, assisted by Rev. A. E. Swinton.

“It would require someone who knew him well, and much more able than I am, to express properly the very great sorrow we all felt, and feel.”

The ordinary business of the meeting was then carried on with.

Secretary's Report—1948.

At all the Field Meetings this year the Club was fortunate in having good weather, though the year has been remarkable for a mix-up of weather samples coming at unusual times, such as warm, sunny days in March, a snowstorm on 1st May, and the worst-ever downfall of rain in the middle of August, when the heavens opened for 24 hours in a manner more suited to the time of Noah. The damage done was colossal: bridges and viaducts were swept away, including about a dozen on the

Berwick-Dunbar section of the East Coast route, while a remarkable feature was the creation of an artificial loch south-west of Ayton, three miles long, several hundred yards wide, and forty feet deep. There was, providentially, no loss of human life.

At three of the four meetings held there were very good attendances, with records of 90 at Lindisfarne, and at Inchcolm on St Swithin's Day. The fifth meeting in September was cancelled out of respect for the late President.

Since the last General Meeting the Club has lost by death thirteen members, including a former President, Major C. H. Scott-Plummer.

23 new members were admitted during the year, making the membership as at this date 354.

A request was received from the Royal Commission Ancient Monuments for particulars of a javelin head which had been exhibited at a Club meeting in 1938. A member stated that it had been found at "The Hart's Leap," Ettrick.

On Floors Castle estate a cist was uncovered, but by the time it was reported the contents had been scattered. The Director, National Museum of Antiquities, Edinburgh, stated that it belonged to the Bronze Age, and a short report by the Royal Commission Ancient Monuments appears on page 145 below.

The Scottish Regional Group of British Archæology intimated that excavations were to be made at an Iron Age fort at Hownam, Roxburghshire, during the summer, by one of the archæological schools initiated in 1947. One or two volunteer diggers from the Club assisted in the operations, which were in charge of Mrs C. M. Piggott, F.S.A.Scot.. Towards the end of the work-period I visited the fort and shot a few feet of ciné film. An abbreviated version of Mrs Piggott's subsequent address to the Society of Antiquaries appears on page 111 below.

An old market cross at Paxton village was reported to have been destroyed. The local County Councillor sent in particulars of the cross and a photograph, which appeared in the 1947 *History*.

As a result of protests against the retention of Ross Links by the War Office as a training ground for anti-tank artillery, a public inquiry was held in Newcastle, the result of which has not yet been intimated to the objectors.

Members of the Club were invited to act as guides in motor tours of the Borders, organised by officials of the Scottish Gardens Scheme for visitors to the Edinburgh Festival, but the response was not overwhelming.

At the meeting, three whorls were on view which had been picked up (a) at Horseupleuch, Longformacus, by Mrs Pate and her son, and (b) by Mr J. S. Leitch, Longformacus, at Cranshaws; along with a short Report by the Director, National Museum of Antiquities, Edinburgh (see p. 143 below). Also displayed was an old map of Scotland, dated 1782, which had belonged to Dr Robert Shirra Gibb, Boon, Lauder, a former President.

Permission to make suitable acknowledgment of material found in the *History* was asked by Miss Petrie, Milngavie, who is publishing *Folk Tales of the Borders*.

Acknowledgment was made to Mrs John Bishop for her Report on the meeting of the British Association in Dundee in 1947, at which she was the Club's delegate. The Report is printed in the *History* of that year.

Reference was made to the death of Major Smail in a few personal notes by the Secretary covering his own acquaintance with him since 1939, when the Major was nominated Vice-President and the Secretary appointed Secretary.

The Report was unanimously approved.

Treasurers' Report—1948.

The Treasurers' Report was read by Mr Purves. Income received for year ending 30th September 1948 amounted to £209, 15s. 6d., which, with the balance brought forward from 1947 of £167, 15s. 9d., made a total of £377, 11s. 3d.

Expenditure (including cost of printing *History* for 1947, £162, 11s. 6d.) amounted to £272, 8s. 6d., leaving a credit balance on General Account of £105, 2s. 9d.

Against this sum there is an estimated liability for printing the 1948 *History* of £103, 12s.

Arising out of the Report, Mr Purves stated that an £80 National Savings Certificate, purchased in 1930, had (on the advice of the Club's Bankers and Auditor) been sold and, with £67, 5s. 10d. of interest, had produced £147, 5s. 10d. This

amount had been placed in a special account with the Club's Bankers. Mr Purves proposed, with the approval of the meeting, that the matter of reinvestment should be brought before the Council at their next meeting. This was agreed to.

Mr Purves also asked that the end of the financial year should be advanced to mid- instead of end-September, as the latter date allowed very little time for his books to be closed and audited. This was agreed to, and the date of 20th September was fixed.

Finally, Mr Purves thanked the Hon. Auditor, Mr Walter Baker, for his kind assistance, and for auditing the Club's books and accounts.

A hearty vote of thanks was given to the Secretary, Miss Caverhill and Mr Purves for all their work.

The office-bearers having retired from office, Mr Middlemas proposed, and Mr Hastie seconded, that they be reappointed *en bloc*. This was approved.

The following new members were elected: John M. Campbell, Duns; E. Walter Millburn, Stow; Thomas D. Sinclair, B.Sc., Westruther; and James I. M. Smail, M.C., Berwick.

The question of the annual subscription was discussed in detail (see Appendix II, p. 95), and eventually a formal motion was made by Mr Buist, Editing Secretary, and seconded by Mr Purves, that "the subscription for 1948-49 be raised to 20s., and that it be decided at the next Annual Meeting whether or not this amount can safely be reduced." An amendment proposed by Rev. Mr Swinton and seconded by Lt.-Col. Logan-Home, that "the subscription be raised to not more than 15s., and that it be decided at the next Annual Meeting whether it should be raised to 20s.," was, on a show of hands, defeated by a 2 to 1 majority, and Mr Buist's motion was declared carried.

The Secretary read a statement (see Appendix III, p. 96) which he had been asked to make in regard to the infringement of part of the Founder's "Rule First and Last," 1849: "Every member must bring with him good humour, good behaviour, and a good wish to oblige. This rule cannot be broken without the unanimous consent of the Club."

A recommendation was made that Rule 10 be amended, so as to ensure that no situation arise again in regard to the offices

of President and Vice-President similar to that in 1948. It was remitted to the Council to frame a suitable amendment.

This being all the business, Mr Buist called for a vote of thanks to Mr Middlemas for presiding.

Three ciné-film reels showing meetings of the Club at various times were run through by the Secretary and much enjoyed. They included, in kodachrome; meetings in 1947 at Pennymuir and Elsdon; also East Lothian, with two shots of the repair works at railway bridges near Grantshouse in September 1948; in panchromatic, the Alnwick meeting, and excavation work at Hownam Rings Iron Age fort in July 1948.

After a vote of thanks to the Secretary, the members dispersed for tea in the hotel.

APPENDIX I (see p. 88 above).

"As Secretary, I have been instructed by the Council of the Club to make the following statement, as the Club at this moment stands in a rather peculiar position which, so far as we know, has no precedent.

"Had Major Smail been here he would have been in the Chair. For a reason which I will come to presently, we have no chairman. But as the business of the Club to-day must go on, I am advised that, legally, the first item in *any* meeting is that such an appointment should be made. Before, however, any member here proposes a name, I must put you wise to the position.

"Normally in past years the printed programme of the Annual General Meeting has stated that "the President will deliver his Address, after which he will appoint his successor in office (*i.e.* the existing Vice-President) and the new Vice-President will be nominated." Then there follows the particular business to be transacted.

"As matters stand to-day, however, as there is no President, first, he cannot deliver his address; second, he cannot appoint the existing Vice-President; third, he cannot nominate a new Vice-President.

"Some time ago Lord Home indicated to me his desire, on account partly of ill-health, to be relieved there and then of his office as Vice-President, and a few days before the end of

August he sent to me, for conveyance to the Council, the following formal resignation:—

“DEAR MR COWAN,

“With regard to my wish to resign the Vice-Presidency, would you be kind enough to notify to the Council my wish to be relieved of the Vice-Presidency for many reasons, because I feel I could not fulfil the duties of the post owing to increasing age. Please say I am very sorry to cause inconvenience, but am sure it is the right course.

“Yours sincerely,
“ (Sgd.) HOME.”

On behalf of the Council I acknowledged receipt.

“So now, in addition to there being no chairman, there is what one might call no heir-apparent to the office.

“Since the Council knew, some time before Major Smail’s death, that this peculiar situation as to the succession might arise, they decided to revert, temporarily, to the reading of Rule 10 prior to 1932, when there were no Vice-Presidents. As this former Rule 10 states that the President is nominated annually by the retiring President, Major Smail decided, with their approval, to nominate a member to be President direct, *i.e.* without his being a Vice-President; while the nomination of the new Vice-President could follow the present reading of Rule 10, namely, at this meeting. After Major Smail’s death the Council decided to make this latter nomination.

“Both offices are filled in alternate years by members from Scotland and England, with occasional divergences. As Secretary, therefore, I was instructed by Major Smail to communicate with a member from Scotland, who is one of the most senior by date of election, Mr F. R. N. Curle, W.S., Melrose. Unfortunately, a long-standing engagement away from home prevents Mr Curle from coming to the meeting to-day.

“In regard to the office of Vice-President, the Council have instructed me to say that they have pleasure in nominating Mr Robert Middlemas, Solicitor, Alnwick. I have been informed by him that he is agreeable to accept the office of Vice-President. Does this meet with the Club’s approval? (The meeting approved unanimously this nomination.)

“Then, in the absence of the President, and on behalf of the Council, I have pleasure now in asking Mr Middlemas to take the Chair.

APPENDIX II (see p. 92 above).

In a discussion on the raising of the Annual Subscription, the Editing Secretary gave various reasons in support of the figure being 20s. per member.

Mr Buist pointed out that the subscription had been raised from 5s. to 10s. in 1921, and that since the Second World War there had been a large increase in labour costs, costs of paper, postages, etc., while, also, during that war, the subscription was only 2s. 6d.

Considerable details were given by him in regard to the *History*, the cost of which was absorbing most of each member's present subscription of 10s. He also pointed out that the current issue (Vol. XXXI, Part I) had been pared down to the very minimum; items such as the Rules and List of Members, etc. had been omitted and accounts of the meetings abridged, while also only one copy per household had been sent to members.

It was a question for the meeting to decide whether the *History* was to be merely in skeletal form, containing the very minimum of information, or whether valuable articles of archaeological and nature interest were to be included. He instanced the case of an article which had been submitted by a member dealing with a subject on which he was an authority, and which would be very valuable not only to members, but as a record of general historical interest. It was, in his opinion, the duty of the Club to support its motto: “Sea, Earth, Sky.”

It had been suggested to him that the subscription should be raised a little, and if found necessary later, that it could be raised again. Mr Buist thought that the Club should be put on a stable footing right off; it was of no use “to make two bites of the cherry.”

On a call for remarks by the chairman several members made suggestions, such as that the funds of the Club could be increased by instituting Life Memberships. Other members argued that, while there might be a temporary gain, the annual subscriptions

would be lost, and in ten years' time the gain would be exhausted.

Another suggestion was that each member should pay for his or her copy; against this it was pointed out that, in return for his subscription, a member expected to receive a copy free.

An alternative was proposed by Rev. Mr Swinton that the subscription should not be raised at all, or to not more than 15s., on the ground that some members would resign and their contributions would be lost; also, that the increase would be a burden on some of them; while, again, there was a reserve in the Club funds to meet any deficit next year.

As already stated, the motion and amendment were made and voted upon.

APPENDIX III (see p. 92 above).

"There is a matter affecting the smooth working of the Club to which your attention should be drawn.

"Probably everyone here knows that the Council decides on the places to be visited (including some of those suggested by members) in the year following the Annual General Meeting. As Secretary, I visit the sites in the months following, to ascertain the best way to get there and what to see, whom to ask to give the talk and where to have tea. I also arrange with the Treasurers about transport (since members' cars are not now in general use), make up the programmes for the printers, and keep hoping, as each date approaches, that it will be a fine day.

"That is all spade-work, though it takes quite a bit of time and thought, postages and telephoning, as well as using up my petrol coupons. I am glad to say that a great many members have always expressed their thanks at the end of the day, and their doing so is greatly appreciated.

"But this year there have been one or two occasions when things have not gone too smoothly, and it is this that I have been asked to mention, as it has meant not only financial loss to the Club, but also an infringement of one of the Club Rules, namely, part of the Founder's "Rule First and Last."

"I am referring in particular to the meeting in August, when

—a large number of the members wrote to Miss Caverhill (as instructed in the programme) booking seats in the buses. But I regret to say that she informed me at Alnwick that quite a number did not turn up at the bus station in Berwick; and what is still worse, they did not even take the trouble to write or telephone that they were not coming. Had they communicated with her, one of the buses might have been dispensed with.

“You may not know that, in the case of private hires, the Club has to be responsible for the total cost of the hire, so that the difference in fares, caused by these members omitting to come, fell upon the Club. Teas at the “White Swan” in Alnwick had also to be cancelled, which again might have affected the Club’s arrangement with that hotel.

“On several occasions there was quite a lot of audible chattering in the audience while the lecturers were talking. This was discourteous to them as well as distracting to other members. But I am glad to say that it was not always members.

“Such unfortunate incidents all tend to upset things, and though they may not happen again—and as long as I am Secretary I hope they will not—some action might have to be considered for future meetings, although that would be contrary to the spirit of the Club and to the Founder’s Rule.

“Dr George Johnston, our Founder and first President, said, in 1849: “Rule First and Last.”—“Every member must bring with him good humour, good behaviour, and a good wish to oblige. This rule cannot be broken by any member without the unanimous consent of the Club.”

NOTES ON THE HISTORY OF LINDISFARNE AND ITS PLACE IN THE CONVERSION OF ENGLAND TO CHRISTIANITY, TO- GETHER WITH A BRIEF ACCOUNT OF THE HISTORY OF THE PRIORY, THE HISTORY AND ARCHITECTURAL FEATURES OF THE PARISH CHURCH OF ST MARY, AND THE HISTORY OF THE CASTLE.

By REV. E. N. O. GRAY, M.A.

THE story of the evangelisation of the Anglo-Saxons begins in A.D. 597 when Augustine landed in Kent. He was sent by Pope Gregory. (Note the traditional story of Gregory—when he was head of St Andrew's Monastery, Rome—repeated by Bede: "Non Angli sed Angeli.") Ethelbert, King of Kent, was baptised by Augustine on 1st June 597, and in the same year Augustine was consecrated Archbishop of the English, with his see at Canterbury. In 616 Edwin defeated Æthelfrid in battle, and became King of Northumbria, and Æthelfrid's sons, Eanfrid, Oswald, and Oswy, fled to Scotland and eventually found their way to the Monastery of Iona. This Edwin of Northumbria—from whom Edinburgh (Edwin's Burgh) takes its name—married Ethelburga, sister of the King of Kent. She was a Christian, and brought with her to the North one Paulinus, who was consecrated Bishop of the Northumbrians in 627. Edwin was baptised the same year, and Paulinus set to work to convert the Northumbrians to Christianity. He baptised the people in crowds—the holy well at Holystone, near Harbottle, was a place of baptism, and from him Palinsburn obtained its name—but his work was short-lived. In 633 Edwin was slain and the Northumbrians utterly defeated by Penda of Mercia and Cadwalla of Wales, "in the plain that is called Heathfield," *i.e.* Hatfield Chase, a few miles north-east of Doncaster. The Northumbrians

attributed their defeat to neglect of their pagan gods, and Queen Ethelburga and Paulinus fled to Kent.

Edwin was succeeded by Osric in Deira (Tees to Humber) and by Eanfrid in Bernicia (Forth to Tees), for the Northumbrian Kingdom was again divided into two. Both these kings renounced the Christian faith, but their apostasy did not save them from destruction by Cadwalla in 634. This year 633-634, because of the death of Edwin, the devastation of the country, and the apostasy of Osric and Eanfrid, is described by Bede as "an ill-omened year, which remains to this day hateful to all good men."

The same year Oswald, on the death of his brother Eanfrid, returned from Iona. He planted the cross as the standard of his army "at a place in the English tongue called Denises-burn, that is Denis's-brook" (Bede). Cadwalla was defeated and slain. The place was renamed Heavenfield—8 miles north of Hexham, "near the wall with which the Romans formerly enclosed the land from sea to sea" (Bede)—and remained for centuries a place of pilgrimage. (It is interesting to note that Oswald was slain by Penda near a place which still bears his name—Oswestry, Oswald's Tree—on 5th August 642. Oswald's head was carried back to Lindisfarne by his followers. Over a hundred years later when the monks fled from the Danes, they placed the head of Oswald in St Cuthbert's coffin. In the reredos in the Parish Church St Cuthbert is depicted holding the head of Oswald.)

After the Battle of Heavenfield in 633 Oswald made Bamburgh his capital, and established his rule over the whole of Northumbria (Deira and Bernicia). Little trace remained of the work of Paulinus. Only two churches existed in Deira. (Here James the Deacon, a young man Paulinus brought from the south, had refused to leave his work after the death of Edwin, and living for the most part in Swaledale, at a village near Catterick, he continued his work throughout the "hateful year." Bede describes him as "a man of zeal and great fame in Christ's church, who lived even to our days." James died at a great age c. 674.) In the whole of Bernicia (Forth to Tees) there was not a single church—"for it appears there was no sign of the Christian faith, no church, no altar erected throughout all the nations of the Bernicians before that new commander of

the army (*i.e.* Oswald), prompted by the devotion of his faith, set up the cross as he was going to give battle to his barbarous enemy" (Bede). Oswald immediately sent to Iona "desiring they would send him a bishop, by whose instruction and ministry the English nation, which he governed, might be taught the advantages and receive the sacraments of the Christian faith." Cormac, the first bishop from Iona, returned in despair, and reported "that he had not been able to do any good to the nation he had been sent to preach to, because they were uncivilised men and of a stubborn and barbarous disposition. Then said Aidan: 'I am of opinion, brother, that you were more severe to your unlearned hearers than you ought to have been, and did not at first, conformably to the apostolic rule, give them the milk of more easy doctrine, till being by degrees nourished with the word of God, they should be capable of greater perfection, and be able to practise God's sublimer precepts'" (Bede). The words marked Aidan out for the mission. He was consecrated bishop and sent to Northumbria in 635. He fixed his see at Lindisfarne and founded a monastery, modelled on that of Iona. Here he was close to Oswald's royal city of Bamburgh, and here also he could live the life of seclusion that had become so dear to him at Iona. He worked for sixteen years under two Northumbrian kings, Oswald and Oswine. The story of Aidan and Oswald needs no repetition. For seven years they worked together, preaching the Gospel, helping the poor, and founding schools. On Oswald's death in 642 Oswy, his brother, succeeded to Bernicia, while Oswine, a kinsman of the old king, Edwin, became King of Deira. With Oswine, Aidan lived on terms of greatest friendship, and when in 651 Oswine was assassinated, Aidan only survived him for twelve days. A modern historian writes: "There is no more brilliant epoch in the history of the English Church than that which is illuminated by that glorious group of northern missionary stars, Aidan, Oswald, Cuthbert, Cedd, Chad, Wilfrid." Aidan founded a school for twelve English youths, attached to the monastery of Lindisfarne. It was by missionaries from this school that the greater part of England was evangelised. Cedd, Chad, and Wilfrid were amongst his first pupils. Chad worked in Yorkshire and the Midlands. He was for three years Bishop of York, whence he retired to his

monastery at Lastingham; but a few months later became Bishop of Mercia and set up his see at Lichfield. His elder brother Cedd also worked in Yorkshire, and then in Essex, where he became Bishop of the East Saxons. He is sometimes regarded as a Bishop of London. Wilfrid, son of a Northumbrian nobleman, was the Founder of Hexham and Ripon. He was also Bishop of York, and was the first to preach the faith in Sussex, and later in Holland and Belgium. Aidan was also the friend and counsellor of Hilda, who belonged to the Northumbrian royal family. At the age of thirteen she was baptised at York, with her great-uncle King Edwin, by Paulinus. Twenty years later she entered a monastery in East Anglia. It was Aidan who called her back to her own country and gave her a site for a small monastery near the River Wear. She later became the second Abbess of Hartlepool, and after seven or eight years there she founded Whitby and became its first Abbess. Here she discovered the great gift of Caedmon, the first of the English poets, who was working as a cowherd on the monastic farm.

There were in all sixteen bishops of Lindisfarne, of whom Cuthbert became the most famous. In his *Introduction to Two Lives of St Cuthbert*—one by an anonymous monk of Lindisfarne, and the prose life of St Cuthbert by Bede—Mr B. Colgrave cites examples of the widespread cult of St Cuthbert which “within a few centuries had reached all parts of England, and many parts of western Europe,” and “which finally led to the building of the noblest of English cathedrals and the establishment of a see at Durham more powerful in temporal authority and richer in estates than any other in the country.”

About A.D. 700 Eadfrid, eighth Bishop of Lindisfarne, wrote a Book of the Four Gospels in the monastery at Lindisfarne, as a memorial to St Cuthbert. This famous book is now known as the “Lindisfarne Gospels.” It was removed from Lindisfarne, along with the body of St Cuthbert, at the time of the Danish invasions. It was carried by the monks during their journeyings, and when Durham was founded, it was laid on the coffin of the saint. After the Norman Conquest it was returned to Lindisfarne and remained in the Benedictine Priory there, until the Dissolution of the Monasteries by

Henry VIII, when its original gold case was removed. The manuscript was unharmed, and passed into the hands of Robert Bowyer, Clerk of the Parliaments. Early in the seventeenth century it was purchased by Sir Robert Cotton, from whose possession it passed to the British Museum. On the last page of this book is a colophon, apparently written in the tenth century. It has been translated thus: "Eadfrid, Bishop of the Church of Lindisfarne, he at the first wrote this book for God and for St Cuthbert and for all the saints in common that are in the island. And Ethilwald, Bishop of those of Lindisfarne Island, bound and covered it outwardly as well as he could. And Billfrith the anchorite he wrought as a smith the ornaments that are on the outside and adorned it with gold and with gems, also with silver overgilded, a treasure without deceit. And Alfred, an unworthy and most miserable priest, with God's help and St Cuthbert's, overglossed it in English. . . ."

Writing to the King of Northumbria in 776, when the kingdom was harassed by internal discord and strife, that great scholar Alcuin of York described Lindisfarne thus: "A place most holy, abundantly enriched with the prayers of many saints, but now miserably wasted by Pagans. . . . See the church of St Cuthbert sprinkled with the blood of the Saints of God, spoiled of all its adornments—the most venerable place in Britain given up to be the spoil of the heathen; and where the Christian religion was first preached in this country (*i.e.* Northumbria), after St Paulinus left York, there we have suffer'd its destruction to begin." Alcuin's phrase, "the most venerable place in Britain," is much quoted. It was no idle claim.

THE PRIORY.

The present Priory is probably the fourth church built on this site. The first was a temporary church built by Aidan. Here he and his followers daily taught the people. His successor, Finan, rebuilt the church of Lindisfarne "after the manner of the Scots" (Bede), not of stone but of hewn oak and covered with reeds. He also removed the bones of Aidan from the cemetery of the church, and enshrined them on the right side of the high altar. This new church was dedicated

to St Peter and St Paul by Theodore, Archbishop of Canterbury. Eadbert, seventh Bishop of Lindisfarne (688–698), took off the thatch and covered the roof and walls with plates of lead. This second church was burnt by the Danes in 875 during the Episcopate of Eardulph, the sixteenth and last Bishop of Lindisfarne. There is no record of any stone church being built before the Benedictine Priory, but the late Mr C. C. Hodges, basing his argument on the fact that the remains found in the chancel of the present Priory are those of a pre-Norman church, asserts, in an article in the *Builder* for 1st June 1896, "There can be no doubt that a stone church existed on the site between the ninth and twelfth centuries." Much evidence has since been produced in support of this view; hence the opinion that the Benedictine Priory is the fourth church built on this site. In 1082 William of Carileph, Bishop of Durham, conferred by Charter upon the Benedictine Order "the Church of Lindisfarne, which had been originally the episcopal see, with its adjacent vill of Fenham, and the Church of Norham, which had been rendered illustrious by the body of St Cuthbert, with its vill of Shoreswood." This gift was confirmed by two further charters in 1084 and 1093. By 1093 Lindisfarne was referred to as "Holy Island." "Here from feelings of reverence for the place which had for so many years been the seat of episcopacy, and from a grateful recollection of the many Saints who had antiently dwelt upon the Island, the Prior and Convent of Durham established a cell of Monks from their house, and called the new settlement no longer Lindisfarne, but Holy Island, in consequence of the sacred blood which had been shed upon it by the Danes" (Prior Wessington, translated by Raine). Ædward, a monk of Durham, was responsible for the building of this Benedictine Priory, which was begun in 1093–94 under Bishop William of Carileph and continued under Bishop Flambard, who built Framwellgate Gate Bridge in Durham City and after whom Framwellgate—Flambard Gate—is named. According to Reginald of Durham (a most reliable source, writing in 1165, and having talked with Gospatrick, the steward of Ædward, who was present during the building and who was still alive in 1165), "The stone of which there was a lack upon the Island, was brought in wains and carts from the adjacent coast, and the men of the neighbourhood willingly lent an

helping hand. There is, indeed, enough of stone upon the Island, but as it becomes cindery by the spray of the sea, and is apt to break into small particles, it would have been unfit for so large a building. Its fragments, however, served to fill the interstices of the walls."

There were fifty-nine Benedictine Priors of Holy Island between 1093 and 1537, the year when the Priory was dissolved and the buildings seized by the king. The last Prior became Suffragan Bishop of Berwick-on-Tweed, and Henry VIII granted him the church and Rectory of Holy Island for his lifetime.

The Priory soon began to fall into ruin. Almost immediately after the Dissolution it was used as a storehouse. In the Border Survey made by Sir Robert Bowes in 1550 it is recorded: "A piece of the roofe of the great storehouse, that was the Church of the Priory, was the last yeare in a great winde, broken downe. . . ." In 1560 it is again referred to as "the Queene's Majestie's storehouse." In 1613 it was finally unroofed by the commissioners of Lord Walden, a son-in-law of George Hume, Earl of Dunbar, who took away the lead from the roof, and everything else of value ("and other commodities thereunto belonging"). "The lead, as you have heard, being intended to have bene transported into the South parts, was, with the ship and manie persons therein, all except one or two, drowned and sonke in the sea, even sone after their goeing from the Island. . . ." (Copy of a communication made by the Chapter of Durham to their absent Dean.)

THE PARISH CHURCH OF ST MARY.

The Parish Church was built by the monks before the year 1145. At that time the Parish of Holy Island included the chapelries of Kylo, Lowick, Ancroft and Tweedmouth, which churches were also built by the monks, who recognised the Parish Church of Holy Island as their mother church, and contributed to its repair until the nineteenth century. The Priory was confirmed in its possession of the Parish Church and its subordinate chapelries by Pope Eugenius the Third in 1145, and until the Dissolution all these churches were served by stipendiary priests paid by the Priory.

The church consists of a nave, two side aisles, and a spacious chancel. It reached its present form in several stages:

1. The Norman Church, built before 1145, forms the present nave and its west wall.

2. The chancel belongs to the Early English period of architecture. It was rebuilt in the first half of the thirteenth century, and may have replaced an apse like those remaining in the Priory. It is of exceptional length in proportion to that of the nave, and in that respect may be compared with the chancels of Bamburgh, Mitford, Bothal, Alwinton and Hartburn, all in Northumberland, all belonging to the thirteenth century, and all unusually long in proportion to their naves.

3. The north aisle was added a little later than the chancel, about the middle of the thirteenth century, the roof of the church being raised at the same time. The semicircular arches of the northern arcade are very fine, and are remarkable for the ornamental use, unique in Northumberland, of red and white stones in alternate courses. The pillars are circular, with circular caps and abaci. Although the arcade was built about 1250, it is Norman in style, an example of the lingering influence of Norman architecture. The Chapel of St Peter occupied this aisle, which was for many generations the burial-place of the Haggerstone family.

4. The south aisle was built in the fourteenth century. The arches which divide the nave from the south aisle are of the Early English character. Their arches are pointed, their piers octagonal and their capitals plain. The Chapel of St Margaret of Scotland occupied the eastern part of the south aisle. It was built as a Chantry Chapel by William de Goswick in 1304. In 1376 this Chapel of St Margaret was lengthened to the west wall of the nave, thus bringing the church to its present ground plan.

The church fell into a state of great disrepair in the eighteenth and nineteenth centuries, but as a result of the efforts of the Vicar and Churchwardens a thorough restoration was carried out in 1860. Prior to that date the church was "very respectably pewed with old black oak. The pulpit is even ornamental. One of its decorations is a shield upon which is carved '1646 T. S. May 3.'" Perhaps the pulpit was the gift of Captain Thomas Shaftoe, who was Governor of Holy Island at that

time. An engraving of the interior of the church in the *Gentleman's Magazine*, 1813, shows the pews and three-decker pulpit referred to above. Both the north and south aisles were entirely unoccupied by pews at this time. In the restoration of 1860, the old oak pews of the centre aisle and the three-decker pulpit were taken out and sold. The floor of the nave was raised nearly two feet, thus burying the bases of the pillars and the chancel steps. The whole of the nave was resealed in pitch pine, and a new pulpit of pitch pine was installed. The walls of the nave were covered with lath and plaster. A few years after this restoration a former Vicar, the Rev. W. W. F. Keeling, found some pieces of the old pulpit in the Manor House yard and had them made into the present lectern.

The following objects are worth noting:—

1. Built into the north wall of the chancel is an incised sepulchral slab. On the top of a tau-shaped cross is a remarkable mitre-shaped shield. By the side of the cross is a sword. The late Rev. E. E. C. Elford, a former Vicar of Holy Island, held the opinion that this is the lid of a stone coffin, which lies in front of the altar, possibly that of the Prior who was responsible for the building of the chancel. The late Mr W. Halliday, a former headmaster of Holy Island School, affirms that the stone formed the lid of a coffin found buried on the south side of the altar, and supports the view that it was that of a bishop, of the Crusading period.

2. Hanging in the chancel are hatchments of the families of Haggerstone, Selby, and Askew, at one time Island landowners. (*Cf.* Raine: "A tenement in Holy Island could, *per se*, have at no time been a thing much to be desired, and yet I find the names of almost all the chief families of the North, at one time or other, occurring as proprietors at Holy Island of larger or smaller estates. Was it the saint or the security of the place which induced them to have the means of residing there when they would?")

3. The Parish Registers and Account Books date from 1578 and are almost perfect. Some of the earliest names are those of families still living upon the Island.

4. The Chalice bears the inscription "Holy Island. 1579." It was enlarged by a York silversmith, and it is not certain

whether 1579 denotes the year when it was made or the year when it was enlarged.

5. Hanging near the church door is a framed manuscript. About 1907 the oldest volume of the Parish Register was sent to be rebound. This manuscript was found adhering to the old binding. It was transcribed and translated by Professor A. Hamilton Thompson in 1934. It is a page of a legal book dealing with the question of canonical ordinations and of hindrances to the same. Professor Thompson expressed the opinion that it is a late fourteenth- or early fifteenth-century copy of a textbook composed in the thirteenth century. It was very probably written in the Priory.

6. Framed in the church porch is the first pillow stone found on the Island. These stones were placed beneath the head of Celtic monks at their burial. The Priory museum contains one of the best collections of pillow stones in existence. They were all found on the Island, and one of them is believed to have been St Aidan's. (It is much more ornate than the others, being carved on both sides, and contains settings where jewels once existed.)

I have been informed (September 1948) by Dr G. H. Christie, of the Architectural and Archæological Society of Durham and Northumberland, that there is a description, photograph and engraving of the pillow stone in the church porch in vol. v, p. 67, of Baldwin Brown's *Arts in Early England*. The inscription is ÆDBERECHT, the name of a male. Baldwin Brown doubts that these stones were put under the heads of corpses, but, rather, thinks they would be put near the head. Plain slabs may well have been used as pillow stones. He also points out that the stone in the Priory museum with the decipherable inscription is of OSGYTH, a female, and hence presumes that the early monastery was of both sexes, like the contemporary ones at Hartlepool and Whitby.

THE CASTLE.

The Castle was not built until after the dissolution of the Priory. It probably owed its origin to the Order in Council of 1539 that all "havens should be fensed with bulwarks and blockehouses." It was built of stone out of the Priory, and by

1544 it was not only in existence but had already required repair. A letter from the Privy Council to the Earl of Shrewsbury, 6th October 1544, states: "His Majestie is well pleased with the repayring of the blokehouse in the Holy Island." In 1550 it is mentioned in the Border Survey taken by Sir Robert Bowes. In 1559 William Reede (afterwards Sir William, and Governor of Holy Island) was Captain of Holy and Farne Islands. Captain Reede was stationed at Berwick, with the pay of 8s. per day. He was allowed a deputy at Holy Island at the cost to the Government of 2s. per day. There were also at Holy Island two master gunners at 1s., a master's mate at 10d., and twenty soldiers at 8d. per day each.

In a letter dated 16th October 1569, Queen Elizabeth puts Lord Hunsdon "in remembrance of Holy Islande, the importance of the place being such as cannot be too warely looked unto."

When England and Scotland became united under King James the Island lost importance from a military point of view. It is mentioned during the Civil War as being loyal to the King in 1643. At this time it was commanded by a gay cavalier, Robert Rugg. Soon afterwards, however, it fell into the hands of the Parliament. On 7th May 1646 the House of Commons made an order to send forces thither, as it was "of such consequence to the northern parts of the Kingdom." In 1647 the Governor, Captain Batton, was solicited by Sir Marmaduke Langdale, the Royalist, to surrender the fort to the use of the King. He refused, and was thanked for his conduct by the House of Commons. In 1648 the Castle was still in possession of the Parliament.

In the first Jacobite Rising of 1715, Launcelot Errington, the Jacobite master of a Newcastle brigantine, then at anchor in Holy Island Harbour, together with his nephew Mark, obtained entrance to the Castle, on the pretext of requiring the services of the master gunner, who sometimes practised "the employment of a barber." At that time the garrison consisted of seven men, and two only were present in the Castle when the Erringtons seized it. The Pretender's flag was flown for a day and guns were fired to attract Jacobites on the mainland. The following day, however, Colonel Laton, commander of the Berwick garrison, sent a party of men, who recovered the Castle and captured the Erringtons.

In 1819 the seven or eight guns which the Castle possessed were removed by order of the Government. As late as 1830, however, there were a few soldiers stationed in the Castle in connection with the garrison at Berwick. It afterwards became the Coastguard Station and headquarters of the Island detachment of the Northumberland Artillery Volunteers.

In 1903 it was purchased by Mr Edward Hudson, the proprietor of *Country Life*, and was soon afterwards restored under the direction of Sir Edwin L. Lutyens.

It was later purchased by Sir Edward de Stein, who in 1944 presented it to the National Trust.

ANNIVERSARY CELEBRATIONS AT COLDINGHAM PRIORY.

By J. A. THOMSON, F.F.A., F.S.A.Scot.

THE 850th anniversary of the founding of Coldingham Priory by Edgar, King of Scots, was celebrated at a special service held in the Priory Church on 26th September 1948, which was attended by representatives of the Presbytery of Duns and by a great congregation which filled the building. The minister of the parish, the Rev. John B. Davie, M.A., presided, and conducted the devotions; the lessons were read by the Rev. Andrew Martin and the Rev. J. B. Longmuir, M.A., B.L., Moderator and Clerk respectively of the Presbytery of Duns. A specially interesting feature was the presence of the Dean of Durham, the Very Rev. C. A. Alington, D.D., D.C.L., who preached the sermon. In the course of his sermon Dr Alington referred to the very close ties that, in the beginning, had bound the newly founded Priory to the mother church at Durham, ties that lasted some four hundred years and are still evidenced by a mass of documents preserved among the archives of the Cathedral. He spoke, in particular, of Prior Thomas de Mel-sanby (1215-18), who became Dean of Durham and was subsequently elected Bishop, but never actually took up that office because he modestly withdrew in favour of a rival who disputed his election, and magnanimously agreed to serve under him.

In connection with the anniversary, the Kirk Session and Congregational Board have set on foot a scheme for the rearrangement and redistribution of the interior of the church, and subscriptions for these purposes are now being received. It is to be hoped that the results will not only add to the comfort of worshippers, but will enhance still further the beauty of a building already so widely known and revered.

EXCAVATIONS AT HOWNAM RINGS, 1948.

A Lecture delivered at Carlisle, January 1949.

By C. M. PIGGOTT, F.S.A., F.S.A.Scot.

THE excavations at Hownam Rings, in Roxburghshire, were directed by me on behalf of the Society of Antiquaries of Scotland in June and July of 1948. The season lasted a month, during which time we lost about 25 per cent. of our digging hours through bad weather. Labour was provided by students from Scottish universities, financed by the Scottish Field School of Archæology, and by other volunteers, and we had no other labour. I am most grateful to all the people who helped either by digging, by giving advice, or other practical assistance. Notable amongst these were Miss Taylor of the Institute of Archæology, who stayed a fortnight and was the only trained help on the site; Mr Hogg from the Tullie House Museum in Carlisle; Miss Gilmore, Mr Glencairn Balfour Paul and Sir Walter Aitchison, who frequently visited the site in his jeep and helped to restore order when wild weather or cattle had wrought an unusual amount of havoc with our cuttings and equipment. Local helpers included Miss W. Simpson and Mr A. A. Buist.

The Site is on a northern spur of the Cheviots, overlooking the Tweed Valley, and is about five miles south of Morebattle and ten from Kelso. The fort itself is on the 1000-foot contour level between the valleys of the Bowmont Water and the Kale Water, and from it one sees the nearby heights of Hownam Law, with its single wall fort, and Craik Moor, and farther east the Cheviot itself, reaching to a height of over 2600 feet. The whole of the area is thickly dotted with hill-forts, which are now being recorded by the Scottish Commission on Ancient Monuments, and the selection of Hownam Rings Fort for excavation resulted from discussions between Mr Graham, Dr Steer, my husband and Dr Richmond. It was felt that this fort had many

recommendations: it was comparatively accessible, it offered reasonable camping facilities nearby, and it was small. But more important than these considerations were the conclusions reached by ground observation in the course of the Commission's routine field-work. For this revealed several interesting features: it was typical in its several structural elements of many other Border and South Scottish forts, and without excavation it was possible to see what appeared to be four different structural periods. Remains of a wall ran round part of the hill; glacis ramparts were obvious on the west side of the fort, and had either never been finished on the south and east, or had been ploughed over; huts were thickly clustered inside the defended area, and several on the north had been built over or into the decayed ramparts. Lastly, on the east and partly outside the fort, was a smaller enclosure containing huts which promised to be the latest feature in the history of the site. And nearby, only two miles westward, ran Dere Street on its way between Corbridge on the Wall and *Trimontium* and Newstead (the modern Eildons near Melrose), so that there was every chance that Roman ware might have reached the site. It was therefore felt that, however slight might be the results of this excavation, it could not fail to throw some light on the sequence of types of defence in the Iron Age and Roman periods in the Borders; information long awaited, and without which it has been impossible to attempt any field classification of the forts.

Such information as we were able to obtain I will now summarise, before presenting you with the evidence, in so far as I have been able to work it out in the short time since the excavations were completed. Naturally a great deal of work has yet to be done on the finds before we can really comment fully on their significance. This is the sequence we discovered:

(1) The south side of the hill was enclosed by a palisade of wooden posts which had, after a not very long life, been replaced by a similar palisade following nearly the same line. No entrance was identified in this.

(2) A sheer-faced wall, some ten to thirteen feet wide at the base, had been built round the top of the hill. How long this existed as a defence is not at all clear, but it was evidently considered obsolete in the first century A.D., for the defences

were modified at that date, and a late first-century quern was included in the blocked-up original entrance of the wall.

(3) The third phase started with the old wall being reduced in height, and some of the large facing blocks being used as a kerb to the inner of several glacis ramparts; the reduced wall being incorporated in this inner rubble rampart. As was the case in the south of England, this new idea of defence in depth was most probably in response to a new offensive weapon, such as the sling or chariot.

(4) Phase four began before the second half of the second century A.D. By now no defences were considered necessary, and a hut—one as I have said of many—was built over and partly into the inner line of defence. On the floor of this hut was pottery of native type associated with some six or seven datable fragments of Roman ware of Antonine date, but in an abraded condition, indicating a date in the second half of the century. At approximately the same date, or slightly later, the small enclosure at the east end of the fort was added, again built over the rampart and ditch, which had either been deliberately flattened or ploughed, more probably the latter. The date for this in the second or third century is fixed by a fragment of glass armlet of Traprain Law type found on the floor of the hut.

We can now examine each phase in greater detail.

The Palisade.—The palisade was accidentally discovered while we were uncovering one entrance of the wall fort. The posts, no wood of which remained, were evidently (from the arrangement of their packing stones) about six to eight inches in diameter, and set in a bedding-trench about a foot deep at one-foot intervals approximately. The outer line shows clearly that the posts were staggered, and one must therefore infer that some sort of hurdling was used. At no time can this have been much of a defence, and it is difficult to believe that it had a very long life. With Heyhope Knowe in mind, only a few miles distant up the Beaumont Water,¹ where two parallel and apparently contemporary lines of palisade have been shown to enclose a hilltop, we thought that the two parallel rows discovered at Hownam were analogous, and were surprised to find the two rows converging and finally coalescing as we

¹ To be excavated in the summer of 1949.

followed them with small cuttings westwards, so that it seems likely that one line is a replacement of the other. The pottery scattered about this area cannot be assigned to the period of the palisade, except for one large coarse base which was actually used as packing in one of the holes.

It was impossible to fix with certainty the chronological position of these palisades. They cannot have existed while the wall fort was in use, as they pass right across the entrance into it. In some cuttings they were overlaid by the inner glacis rampart, and are therefore earlier than that. But as the wall seems to have been succeeded immediately by the glacis ramparts, we are left to conclude with reasonable certainty that the palisade was the earliest structural feature. If we had had time to follow them only a very little further, I suspect we should have found them passing under the fort wall and emerging on the inside of the fort.

The Wall.—The wall was discovered in three cuttings: in the main cutting through all four ramparts on the west of the hill, at its entrance on the south, and in the cutting through the hut and rampart on the other side of the hill. It was constructed of large stones faced on either side by larger blocks, and there was no attempt at coursing. The structure showed no signs of having had wooden tie-beams in the Gallic wall manner. The entrance through this wall on the south had unfortunately been much robbed on one side, but a single large stone, probably too cumbersome for the robbers to move, had remained, indicating, if we are correct, a width of only four feet for the entrance, which showed no signs of gate post-holes, and may have been a simple cut through, closed, when necessary, with some movable object like a hurdle. It is worth noting that no wheeled traffic could have passed through this entrance. As originally built, this wall must have constituted quite a formidable defence, for with a base as wide as twelve feet it is likely to have stood eight or nine feet high at least. Among the stones evidently placed to block this entrance when the multiple rampart builders replaced it with another entrance farther west and lower down the slope, was the lower stone of a rotary quern of only a slightly convex section. This type should belong to the first century A.D., and it may be that the recasting of the defences at that time along more up-to-date

lines was due to refugees from the south spreading their ideas of warfare among the northern natives. At all events these multiple defences are common enough in the south of Scotland, and in three or four sites the surface indications suggest that such multiple rubble ramparts replace earlier forts with sheer-faced walls in the Hownam manner. These reflect conditions when it was necessary for the new overlords from the south to defend themselves against other refugees, quite as much as against the Romans. If these men had had any experience of warfare with the Romans, they should have known that such small forts of the Hownam Rings type would have presented no effective opposition to the legions.

The Multiple Ramparts.—With the need for new defences, we find the stone wall reduced in height, and some of the facing-blocks used as a kerb for a glacis rampart thrown up against and over it from the outside. At the same time, presumably, the two other banks and ditches were constructed as part of a unitary system of defence, which was strengthened by yet another on the west. These ramparts remain in good preservation on the west and north of the hill, for here they were constructed with stones either collected from the surface or hacked out from the rock, and in the 125-foot long cutting right through them all on the west, it was clear that there had never been any attempt to make a very definite ditch. On the east and south of the hill, however, where the easier slope gave less natural defence, the rocky subsoil had been covered with a thick glacial deposit of sand or clay, and here the ditches were more carefully and deeply cut, and some material for the ramparts obtained from them. On the south a berm, fourteen feet wide, had been left between the inner rampart and its ditch. Only the inner of the glacis ramparts showed evidence for a stone kerb.

On the west, every advantage was taken of the steep slope of the hill, and the builders had been able to obtain a good sloping glacis face to their defences by scarping and a minimum of built rampart. The make-up of these ramparts was of the simplest, and was interesting geologically as much as archaeologically, since the subsoil varied from bedded rock to yellow clay, and even orange sand and gravel.

Quite a large quantity of pottery came from the make-up of

these ramparts, and in the second rampart occupation soil with ash and animal bones (probably from the stone wall phase) was incorporated, and formed the bulk of the section exposed.

The entrance to the multiple-rampart fort was clearly visible on the south side of the hill, the stone kerb of the second rampart being particularly massive and showing the width of this entrance to be eleven feet—significantly wider than that in the fort wall, and sufficiently wide to allow of the passage of wheeled vehicles, such as carts or war-chariots. This entrance was partly stripped, but produced absolutely no evidence of post-holes or other features.

The inner ditch section on the south was informative, for it showed that practically no silt had collected in it before the kerbstones of the rampart had fallen down into it, and shortly after that it had been levelled by ploughing. This strongly suggests only a short life, and it may be that this multiple-rampart phase of the fort was begun in about the year 70 or so, when political refugees, fleeing before the advance of the Romans, were carving out new kingdoms for themselves in the Scottish Lowlands—a date in accord with the quern already mentioned. As we have seen, the defences do not seem to have remained in use for long, and their end must have come well before the middle of the third century.

The Roman subjugation of southern Scotland following on the Agricolan campaigns would provide the setting for this abandonment of hill-fort defences, though it is interesting to see that the site was not deserted as a settlement. This seems at first to have been confined to the area within the old fort wall, and the glacis ramparts on the more or less level area to the south and east appear to have been ploughed over, for the floor of the hut we excavated on the east end of the hill had been built over the second ditch, and paving-stones laid upon its filling, and this hut, like the hut on the north-west, was built in the second part of the third century A.D.

By the second century (it is reasonable to infer during the temporarily settled conditions then prevailing) we can imagine the whole of the south and the east of the hill being under plough. More and more huts were built on the hilltop, so that living space was difficult to find within the fort wall, and a subrectangular enclosure containing huts was built, partly

outside and partly inside the obsolete defences and overlying the filled-up ditches of the multiple ramparts. On the north-west another hut was found to have encroached over and into the innermost rampart with its contained remains of the fort wall.

The Huts.—These are the last phase of occupation revealed in our excavations. Both the huts we examined were slightly oval, but approximately twenty feet across. That on the north-west had its walls built of stones and roughly faced; the other had walls of earth and stones, again faced with larger blocks, though these had been largely robbed and only two or three remained.

The floors in both huts had been partially paved, and it is interesting to note that there was no central post-hole in either hut, nor elsewhere in the hut floor. The weight of the roof must have been borne on the walls, which were four or five feet thick, and most probably took the drainage from the roof like the Hebridean black houses of to-day.

The second hut had a pit near the centre, too large for a post-hole, but possibly a storage pit. It contained two or three fragments of native pottery, and was dug into the filling of the underlying ditch; it also contained a shallow stone-lined hollow of uncertain purpose, and a whetstone and some sherds of pottery, while other sherds were found scattered on the floor of the hut. This ware was all very coarse, but varied considerably, though it mostly belonged to flat-based, thick-walled pots with simple rounded rims. There was little to distinguish it from the pottery in the first hut, though it contained one large jar with coil-built walls and made of finer paste than anything from there. Very few fragments of Roman pots came from the second hut, but in the make-up of the hut wall was a bronze nail-cleaner of Roman type, and on the floor fragments of an amber glass armlet with opaque white inlay. These armlets have been studied in some detail by Kilbride Jones, and he mentions one example only which is strictly comparable with our Hownam one—from Traprain Law, where these armlets may have been made. Comparable examples have been shown to occur in the area between the two Roman walls, and to date from the first to third centuries A.D. Other finds from this hut included whetstones and a little slag.

The first hut produced several pounds' weight of native pottery, one large vessel being restored to show an incurved rim and flat base. The paste is very thick and coarse. No single piece of native ware was ornamented at all, and all rims were rounded. Fortunately this pottery was associated with quite a sufficient number of Roman sherds, both Samian and sherds with lattice-burnishing, to show that the date when the hut was occupied was in the third century, probably in the second half of it. There were no metal objects from this hut, the only other finds from the floor including a stone weight with hour-glass boring, a fragment of rotary quern, rubbers, whetstones, a half-completed flat spindle-whorl, and a George III penny and shepherd's clay pipe found together in a disturbed area of the hut floor.

The distribution of these finds was interesting, as nothing was found on the left of the entrance near the walls, and this may have been the sleeping quarters.

Presumably broadly contemporary with these huts was a small storage-pit near the first hut. This was about three feet in diameter and three feet deep, carefully paved at the bottom. It contained three or four potsherds and a Roman blue glass bead.

Among the finds from this last phase and the two preceding phases we were fortunate in recovering a number of animal bones, which have been examined by Miss Platt in Edinburgh, and found to represent sheep, ox, and a small pony of about twelve to thirteen hands.

SUMMARY.

There are a number of points not yet cleared up by this excavation, and it may be decided that further work on the site will be worth while. While appreciating this, I feel that work on other sites will be more instructive, since we do not yet know that the Hownam sequence is typical. The aim of the excavation was to begin to provide material for a skeleton sequence of hill-fort construction and techniques in southern Scotland, and although such a sequence is established at Hownam, it has yet to be checked on other sites. Surface indica-

tions do, however, suggest, as Dr Steer has emphasised, that the replacement of sheer-faced walls by multiple glacis ramparts may have taken place on three or four other sites in Roxburghshire.

The large amount of pottery from Hownam seems to show on first judgment that the people who built all phases of the site were essentially of the same stock right through, from perhaps the first century B.C. to the second A.D. Military techniques changed, and so perhaps did the rulers, as my husband suggested the other day, but at least at Hownam I think it unlikely that the main bulk of the population of the fort at any period of its life came as immigrants to the district. Settlement by Iron Age B farmers and peasants seems mainly to have been in the west and north of Scotland, and the A tradition as represented by the Gallic wall forts (which may imply folk movements as well) is also largely to the north of our area, so far as its distribution is known. The pottery at Hownam reflects a peasantry still in a Late Bronze Age tradition, descendants perhaps of the makers of cordoned urns and flat-rimmed pots, most probably with some Iron Age A admixture.

While it is possible that the sheer-faced wall technique of fort-building owes something to Iron Age A traditions, there is no necessity to deny the local Late Bronze Age population the capacity for having invented it for themselves.

Using the Hownam sequence as a guide, I would now like to find a site for each phase represented, and in each case uncontaminated by later occupation. At so many of these sites with only a little soil above the rock, it is impossible in cases of heavy and continuous occupation to associate your huts, with their datable finds, with any defensive system. The Royal Commission know of such single-phase sites, and we shall hope to be able to do some work on them in the near future. Then only, if we are fortunate, will we have built some sort of framework into which we can fit with any degree of certainty the story of the Iron Age of southern Scotland and Northumberland north of the Tyne.

EXTRACTS FROM THE RECORDS OF THE
“FIVE TREADS” OF DUNS. TAKEN FROM
MS. NOTES BY THE LATE A. A. FALCONER.

EXTRACTS from Minute Book of HAMMERMEN.

(BOOK I.)

ACTS of the Incorporation of Hammermen within the toune of Dunse, 4 ffebruarie 1714.

1. In the first it is statut and ordained by the hail bodie of the Trade of Hammermen within the Toune of Dunse, that none of the said Trade be absent from prayer and preaching upon the sabbath day under the paine of ffour shilling the master two shilling the prentis or servant toties quoties to be applied for the common use of the Trade.

2. It is statut and ordained that non of the said Trade of Hammermen take anie prentis for shorter space than four years and the ffyth yeare for meate and fee and the master who takes his said prentice shall com to the Decon & Quartermasters of the said Trade and advertice them thereof under the paine of Ten Markes and the prentice ffyve pound twelve shilling money to be applied to the common use of the Trade.

7. It is statut and ordained that if aine of the said trade shall be accused for pykin or stealing from their masters it shall be leesom and lauffall to the Deacon and Quartermasters of the Trade to discharge him to worke in the said trade till the matter be discust befor the ordinar Judge and if anie be found guiltie That he be dealt with according to the arbitrement of the Judge and gratness of the offenses.

9. It is statut and ordained That in tyme of the Meetings of the said Trade and all other tymes their speeches and behaviour to the Decon and Quartermaster be with modestie and sobrietie and that non of them shall flyt or injure others by woord or deed under the paine of fourtie shillings Toties Quoties.

13. It is statut and ordained that non of the said trade shall take anie other tradesman's customers' worke untill the first workeman be fullie satisfied of all bygone conditions and worke dew to him by the customers under the paine of ffyve punds money to be applyed to the common good of the trade.

16. It is statut and ordained that the Deacon for the tyme shall have pouer to put anie persone of the Incorporation in the Tolbooth for anie malversatione or transgression and to take him out againe at his pleasure upon payment of the fee allonarly except for ryots which is remitted to the Baillie.

17. It is statut and ordained that ilke persone of the Incorporation shall pay to the box for the use of the trade two Shilling Scots quarterlie at the quarter meetings and with power to the Deacon and remanent members to augment or diminish the same as they shall think fitt and summerly to poynd those that are diffitient for payment of the same.

3 ffenry (? februarie) 1729. It is statut and ordained that no master of the incorporation shall hyre a stranger else long as their are any of the incorporation or jurneman that is entered wants work and is willing to serve providing they can agree under the penaltie of Ten punds to be payed for the use of the Trade.

May ye 4th 1724. It is statut and ordained that no Master shall take a prentice until he pay to the said Tread ten marks the one half to be payed be the Master and the other Half by the prentice and four punds for a dinner to the tread.

May 14th 1726 It is statut and ordained that no person within this Corporation shall go in at any burrill to take drinks or drams without they be near friends to the persons conserved under the pain of Six pound Scots to be applyed to the common use of the Tread.

1737

Mony Laid out of the Box

October	day		lib	sh	ds
	1	for a Treet to ye Bailie	0	3	00
December	15	The whole tread fined by the Deacons for not coming to the buriels of —	0	2	00
1738			£	sh	d
January	28	To Mathew gradin (? Gradin) a passanger	0	0	04

122 RECORDS OF THE "FIVE TREADS" OF DUNS

1732

Feb'y	20	At a meeting with the bailie about estblishing ane Everlisting Fund	£	sh	d
			0	1	06
	25	At a nother meeting with the bailie about ye casaways	0	0	09
Aug ye	6	To James Ramsie and others of the shipcrew sore distressed	0	0	6

1733

May ye	27	To William Tylor going to the bath with a boy	0	0	4
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Extracts from Accounts.

1739

Octr.	20	To a treet to the Beley	0	5	0
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1741

		To 3 broken seamen withe a pas	0	1	0
		To one Roxburgh with a pase	0	0	6
		With the bailie severall times about the Riding- Skoull tilling	0	1	6
		The tred fined by the Dikens	0	0	6

Account of mony dispursed by John Crawford for ye morcloaths that the
Treads laid out August the 16th Day the year 1726.

	£	S	D
Imp. To 9 yeard and $\frac{1}{2}$ of fine black velvet at 19sh. per yeard	8	15	9
To 12 yeards of black plush at 6 sh per yeard	3	18	—
To thre yeards of black velvet at 19 sh per yeard	2	17	—
To four pound Eleven ounce and a half of silk fringe at 16d per ounce	5	00	8
To five pound of hair fringe with a silk web at 7 de $\frac{1}{2}$ per ounce	2	10	—
To three pound of silk fring at 16 de per ounce	3	04	—
To five ounce of hair fring at 7de $\frac{1}{2}$ per ounce	0	03	1 $\frac{1}{2}$
To Lynning 21 yeards at 13 penc $\frac{1}{2}$ per yeard	1	03	7 $\frac{1}{2}$
To Buckram 9 yeards and 3 quarters	0	09	9
To the Box that brought out the Morecloaths	0	02	—
To silk and Thread	0	04	6
To making and Charges	1	05	3
	<hr/> 29 : 07 : 8		

To the above soum the Hammermen Laid out for the buying
of those Morcloaths they being 49 in number, each
member advanced three shillings and seven pence stirling £ 8 : 15 : 7

EXTRACTS from Minute Book of HAMMERMEN.

(BOOK II.)

1751-3	To a Bouk of Mutton to John Duncan	£ 0 : 4 : 0
	Spent with the Baillie and the Deacons at a Meeting with the New Clerk	0 : 1 : 3

1753-5	Spent with the Deacons and Mr Lorain about the Collery	£0 : 0 : 6
	To a Meeting about the Collery	0 : 0 : 3
	To five Quarters and a half Stent for the (?) Rolbooth, Streets and highways at 8. 3 $\frac{1}{4}$ is	5 : 0 : 7 $\frac{1}{2}$
1757-59	To Mitting with dikene about the Comone	0 : 0 : 6
1783	(An isolated entry)	
	The Dedutione of Seal of Pease Meal and other charges for selling the Meall	5 : 10 : 8 $\frac{1}{2}$
1791	A dispute with John Cockburn, a cooper, over "unsufficient coags" figures in this years accounts.	
1792		
June 5	Searching the fare	0 : 2 : 0
	By Paper and Candle	0 : 0 : 6
July 6	By Mr Patterson for pettitioning Mr Hay on account of the Riots with the rest of the Deacons	0 : 2 : 0
In the Receipts.		
	Received from John Cockburn as a fine for having unsufficient goods in June fare 1791	0 - 5 - 0
	received from do. as a fine for deforcing Searchers in June fare 1792	0 - 5 - 0
1793		
Oct. 11	To the Mickelmis Dinner	0 - 12 - 0
Oct. 18	To Deacons Meeting with a Committee of the Unincorporated about examining the fountain head on Dunse Law	0 - 1 - 0
24 Oct.	To a Deacons Meeting to petition Mr Bowmaker concerning the grave's digging	0 - 1 - 0
29 -	To a Meeting with the Bailie and Unincorporated insisting upon the examination of the Law Well	0 - 1 - 3
5 Nov.	To expences after examining the Law Well with the Bailie and deacons	0 - 2 - 0

Decr 16 1799

At a full Meeting of the Hammermen in the Church they unanimously agreed that the Tread should immediately by in meal of Different sorts to sell to the Tread at prime cost and they appoint John Foord and John Aitken to purchas the same where they find it most expadient and the Society agree to defray there expenses in so doing and to enable them to procure the business they authorise the Dicon to Borrow ten pounds stg. and to grant Bills in there name payable six months after date.

124 RECORDS OF THE "FIVE TREADS" OF DUNS

1813

Febry.	Cash Laid out for Drink that night that the Hammermen meet for to vot for to walk on Mr Hay's Birth Day	7 - 6 !!
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1831

Aug. 21	At a Conveners Meeting expences	0 - 1 - 6
	Expense for the Reform Petition	0 - 3 - 0

Dunse Oct 10th 1845

The Incorporation of Hammermen having met this day in the House of Wm Jack, Hammermans Arms Inn, the following Office Bearers were elected unanimously.

EXTRACTS from Minute Book of CORDINERS
(SHOEMAKERS).

Dunse, May ye 8th 1673

It is statute and ordained by the wholl consent of ye tread yt non lay forth to sell Littell or Mickell untill the searchers goe through ye Markit and have done with searchin under ye pain of Half a Mark for ilk fault toties quoties

At Dunse ye 5th of Ffeby 1719

The Deacon wt consent of the whole Trade discharges all tanning or barking of leather wt sauch bark either Roll or Dressing Leather and if any doe in the contrary wherever it shall be found less or more it shall be confisk:

At Dunse ye 2th of feby 1727 years

It is statut and ordained by the whole trade non in ye sd trade either master or servants shall be found out after ten of ye clock at night being ye Fastern week what then in this (case?) the master shall be discharged from giving ym any work under ye paine of fyne pund Scot and that they shall not give more then ten sh ster. for ye football & to compell no man

EXTRACTS from Minute Book of TAILORS.

The Tailors Book is a Large post 4 to. book with pasteboard covers. It is labelled TAILORS, 1741, but the first entry is dated 1763. The writing commences on page 3, ends on page 86; the last date is 11th October 1841.

(3)

1763

Oct. 12th Our Roulls that is agreed oupon By the Tread in vottes.

That there is no mony given out of the Box to Stragleres by the diken of the sead tread for their was much given out formerly to the Los of the tread and so we all agreed to do but littel but to dispurs it in other ouses for the benefit of the tread.

The 2th Roull

To be observed is This that the Deatts is to be put ounto the Box and the Mony every Quarter what is over paying the Quarter's poors mony and is to be set down in the ples that the stok is set down in this Book and wheir the sed Dikenes is shargabell withe and that with the Clark of the sed tread and Likewis what mony is got for oupssets of Mesters and prentices deus that is got in or booken monys is got in the diken is to give an count every Quarter and theis is to be set down Likewis to the stok in this Book with the Clark of the sed tread.

* * * * *

On Roull for the dikenes for given out the Morcloth It is agreed that the Morcloths ar to be given out oupon the fouling expens. viz: the big cloth in the toun at 4 shiling and not exceeding 2 milles at 5 shiling and exceeding that 6 shiling the small clothe at 1 s in the toun 2 shillinges out of it this roul is for the outlings.

1778

June 2 Wilam Dugles prentice binding

0 - 3 - 6

1779

January 25 Given out of the Box to pay for the Papis Bil at
the sem time spent at difrent times with the
rest of the dikenes

0 - 3 : 10

1780

Febury 20	Given out for Lord George for the protestint intrist	0 - 5 : 6
-----------	--	-----------

1787

Given out for December prosheson	0 - 4 : 9
Given out to the publick	0 - 1 : 6

1792 Att a Mitting of the tread itt is agreed and inected
DUNSE that if any of the members is absent at the reagler
Augst mitting ours it is resolved they ar to be fined in the
29 folwing way Every member is to be fined tow pense
three pense or Fowr pense according as the mitting
thinks proper and if any go away from the mitting befor the
mitting desolvz they ar to be fined also in the same way and
the mony is to be putt in the Box for the yous of the tread.

1796

Nov	Given for the Men for the Navy (? buying off pressed men)	3 : 5 : 4
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A BOOK

Belonging to the Five Treads

The Hammermen, Shoemakers, Skinners, Weavers and Tylers
Containing the method of the Fund raised for the buying of
the Morcloaths

As also

The prime cost and what every Tread Laid out with every one
shair of the gain

As Likeways the Acts of the Five Deacons what every one is
to pay for them when they bury there dead according to there
several stations and relations.

DUNSE, August the 16th the year 1726. It was condescended
upon by the five forsaid treads to buy Three Morcloaths. In
wit, a bige velvet one, a childes one of the same, and a plush one.

It was likewise agreed upon for the raising of the money that every member within the said five traids should advance three shilling and seven pence sterling.

The Hammermen being 49 in number advanced for there pairt	8.15. 7
The Shoemakers being 38 in number advanced for there pairt	6.16. 2
The Skinners being 33 in number advanced for there pairt	5.18. 3
The Weavers being 28 in number advanced for there pairt	5.00. 4
The Tylors being 16 in number advanced for there pairt	2.17. 4
<hr/>	
The total soam	29.07. 8

DUNSE the 8th October 1764. It was agreed that the Trades Mortcloths are to be given out at the following expence viz. The Big Mortcloth in the Toun at 4 shillings and not exceeding 2 milles at 5 sh. and exceeding thatt 6 shillings, the small cloth at 18 pence in the Toun and 2 shillings out of itt. The above Reull is for those that is not Incorporett not belong to the sed 5 treades and thos that is not intred as Masters and that al Jurnimen is to pay the above sharg that has not served their tim in the toun but those jurnimen and prentises that has served their tim and has payed their dues to the said five Treads shall have the mor clothes as it is statut in the book in the 2 page.

DUNSE, Sept. 8 1784

Att a legal mitten on Lawfull and Publick Bussiness finding the Decon of the Hammermen absent, He therefor by the consent and vott of the other four Decons and Boxmaster unanimously fined of two shillings and sixpence starling and orders the sain to be paid at the Michelmiss mitten foulluing this Deat.

DUNS 12 Octr. 1795.

At a meeting of Deacons and Boxmaster it was noted that the Deed statut in this Book 1772 is altered so that no Deacon

or Box master is to be fined for absence at meetings untill he gives in his excuse

John Ford, Deacon of Hammermen.

James Purves, Deacon of Shoemakers.

William Miller, Deacon of Skinners.

John Knox, Deacon of Weavers.

William Spence, Deacon of Tylors.

James Wilson, Deacon Convener.

DUNS 12 Oct. 1801.

At a meeting of the five trades Thomas Hill Boxmaster for the Shoemakers was absent from examining the mor cloath and he was sent for buy the officer and he refused to come in present of the Ten Deacons and nine Boxmasters and they fined him of Tow shillings and to be paid at Michelmas next.

Extract from the Kirk Session Novr. 4 1799.

Whereas the Five Traids in the Town of Dunse having been allowed as an indulgence in minute of the Session Record Novr. 13th 1726 the privilege of using a mortcloth of their own have as far abused that privilege as to lett out their mortcloth for hire and to give the use of them to persons not belonging to any of the Traids thereby graity injuring the parish Funds the Kirk Session after consulting the Heritors and other competent judges and being Besides furnished with express Decision of the Court of Session ascertaining the exclusive right of the Session to let out Mortcloths after serious deliberation find themselves not only entitled but also bound as Trustees for the poor of the parish to enact that from the date hereof no mortcloth except that belonging to the found in their admininstration for the benefit of the poor be used in this parish unless in the burial of those their wives or children who while alive expressly belonged to one or other of the Traids Reserving to themselves if they shall see necessary the power of withdrawing the indulgence granted in the above cited minute of session. They

ordain a copy of this minute of session to be furthwith transmitted to the five Traids of Dunse and another to be lodged with the parish Bedle with orders to him to intimat their purport to all who apply for Burial of their relations and not to break the burying ground or suffer it to be broken for any by whom the Law to the above effect is contravened. Signed George Cunningham, Minister. David White, Sess. Clerk.

When the above Act was put in the Convener and the present Deacons apointed Mr. James Knox and Mr. John Simorton Boxmasters to aplay for the minute from the Heritors Book relating this Business which is as follows.

Dunse 11th Novr. 1726. The Heritors considering that the Five Traids of Dunse, viz. the Hammermen, Taylors, Shoemakers, Skinners, Wivers, desiring to make use of their own Mortcloths Therefor the Heritors have stented them to thre pounds Twelve Shilling Scots money per week subject to notwithstanding to an augmentation as the other Founds for the Maintenance of the poor increase. They alwise paying to the Bellman his ordinar dues. Remit to Bailie Lawder, Clerk Litster and William Grieve Senr. to stent the individual persons of each Tread with the advice of Wedderburn and Mr. Windram.

Extracted from the Records of the Heritors Books by David White Sess. Clerk.

1845. Oct. 10. The Deacons and Boxmasters of the five Incorporated trades of Dunse having met this day in the house of Wm. Syminton and having examined the mortcloths found them all correct after which it was agreed that in future the charge for the Mortcloth will be one shillinh sterling in full of all charges.

Note.—Mr R. G. Johnson, O.B.E., County Clerk of Berwickshire at Duns, informs me that these Extracts were not taken by him from the Guild Records, but from MS. notes by the late Mr Falconer, "a well-known member of the Club." They were given to Mr Johnson by Miss A. S. Falconer, deceased's sister, and may be regarded as authentic, though the whereabouts of the originals is not known. Two other Extracts are withheld from considerations of space.

(Initd.) A. A. B.

SCULPTURED ROCKS.

By H. H. COWAN.

It would, I think, be quite safe to state that absolutely nothing is known now by anyone as to the significance of the curious markings on rocks which have been found in various parts of this country, not only in Northumberland, where most have been found, but elsewhere in Britain and even overseas.

In the following pages there is no intention by the "scribe" to give an original opinion on such objects, but in the main merely to bring to twentieth-century members information collected in the nineteenth, which few of them will have in their possession, namely, extracts from one of the early volumes of the Club's History.

The idea of doing this for the benefit of present members was due to the receipt, in the end of 1948, of a photograph of a rock bearing incisions, which at once made reference to the earlier information necessary, and thus the following notes were put together. The photograph (fig. 1) is, along with some ciné views taken in 1939, the only modern type of view which the writer has seen of these ancient—for want of any more definite name—"Sculptured Rocks." As the late Mr Will Davison, Newcastle, said during his address to members at the West Horton Rocks in 1939: "Only the men who made these marks know what they are and represent, and GOD: And the men are dead."

As will be mentioned later in a quotation from the original article, it is fitting that the discoverer of this stone should be recorded, namely, Mr Edward Miller, East Bolton, Alnwick, who also sent in the following note:—

"I am drawing your attention to a hitherto unrecorded rock marking on the moorland on Jenny Lanterns Hill. It is quite near the East Bolton to Bolton road; on the south side of the road is a cottage, named Midstead, and directly opposite the east fence of this holding and in a line with it, 50–60 yards on the moor side, this stone is at the base of the rocks."

Members can "read" for themselves the markings on this rock,

comparing them with other plates reproduced, as well as with references in the text.

Extract from article entitled :

“The Ancient British Sculptured Rocks of Northumberland and the Eastern Borders, with Notices of the Remains associated with these Sculptures.”¹

I. HISTORICAL.

Nearly forty years ago (1824) Mr J. C. Langlands observed some worn and defaced figures incised on a rude sandstone block, near to the great camp on Old Bewick Hill in North Northumberland. Though strange and old-world looking, these figures then presented an isolated fact, and he hesitated to connect them with by-past ages; for they might have been the recent work of an ingenious shepherd, while resting on the hill; but on finding some years afterwards another incised stone of a similar character on the same hill, he then formed the opinion that these sculptures were very ancient, and probably the work of the same people who erected the strong and complicated fort cresting the hill. To him belongs the honour of the first discovery of these archaic sculptures. But his discovery assumed greater importance and significance when, in 1852, the Rev. William Greenwell found another stone with similar figures near Routing Linn, 12 miles to the north-west of Old Bewick. In the course of the summer of that year, while engaged on ancient British sepulchral remains, I visited this stone along with Mr Greenwell. On that occasion we pulled off a covering of turf nine inches in depth and exposed several figures, which then appeared sharp and distinct, having for centuries been protected from the elements. After again visiting these rocks, I submitted sketches of them to a meeting of the Berwickshire Naturalists' Club, on 13th October 1862; which “issued in a determination to see these singular and mysterious inscriptions on the spots where they yet remain.” In October of the same year I gave, in my Presidential Address,² a description of the principal figures on the Routing Linn and Old Bewick stones,

¹ George Tate, F.G.S.: *Ber. Nat. Club*, vol. v (1863-68).

² George Tate, F.G.S.: *Ber. Nat. Club*, vol. iii (1850-56).

with some general views of their age and meaning which have since been pretty generally adopted. . . . Walked to Routing Linn; the Rock was readily found, but it was not so easily decided by whom and for what purpose the engravings were made. I offer a few observations.

The sculpturings are grooves of moderate depth, chiefly forming incomplete circles or series of concentric circles, in some cases as many as four, around a central hollow from which a straight groove proceeds through the series of circles and beyond them. The straight grooves in one or two instances unite; and from this combination of circles and grooves a device results not unlike the "Prince of Wales's Feathers." Other sculpturings are of the shape of horseshoes, graduated in size, and placed within each other, but still having the central hollow with the straight groove. They are scattered over the rock and vary in size, the largest being upwards of two feet in diameter. When viewed in connection with other facts, some inferences may reasonably be drawn.

That they are of great antiquity is proved by the depth of peaty soil which covers part of them, even on the slope of the rock, to as much as nine inches; beneath the soil the incisions are sharper than those on the exposed surface. At both Old Bewick Hill and Routing Linn the rocks stand eastward of ancient camps, which have the Celtic form and construction, and from this connection they may, without hesitation, be referred to the ancient British inhabitants of the county. Some significance seems to be involved in an eastern position, for I find that the remains of Celtic dwellings, on Beanly Moor and on Hartside among the Cheviots, have their openings to the east. May there not be in this some indication of the worship of the Sun—a fragment of Eastern superstition, which regarded light and the Sun, the greatest of all lights, as the type of the Good Spirit? These two rocks are near to camps, but others have been found connected with sepulchres. Incised stones, having a like character, have been observed at places far distant from each other, but which have been peopled by the Celtic race; they have been found at Annan Street, near Craigiehall in Scotland, in Ireland, and even in Brittany.

Independently of their meaning, these relics cannot be viewed without interest as the earliest examples of sculpture in our

island. I cannot regard them as the amusements of an idle soldiery, nor as plans of camps, nor as exercises of incipient engineers; for their wide distribution and family resemblance, notwithstanding differences in detail, prove that they had a common origin and indicate a symbolical meaning, representing some popular thought; and though I cannot spell the rude lettering, I fancy they tell, since they are associated with the last remains of Celtic heroes and sages, of the faith and hope of the aboriginal inhabitants of Britain.

I have, year after year, examined and sketched all the stones discovered in the Border land, and noted the antiquities with which they are connected; the researches made in the district by excavations into British oppida, forts and sculptures, help to throw light on the period to which these blocks belong.

Most of Mr Tate's drawings of the markings were done to scale, aided by tracings and rubbings, and he pays tribute to geologist, antiquary and artist, who united to produce correct representations of the forms of the sculptures. In every case he attributes a discovery to its proper source.

Those who follow in the wake of our original observers know little of the labour endured in the discovery of even apparently trifling facts. The discoverer therefore of an inscribed stone, or any other antiquarian object, is as much entitled to honourable notice as the discoverer of a plant or animal. I believe that a collection of authenticated observations will have their value even though we may not arrive at a satisfactory explanation of the meaning of the symbolical figures.

II. CHARACTERISTIC FIGURES.

The most typical figure is composed of a series of circles around a central hollow or cup, from which proceeds a gutter or radial groove through the series of circles, or there may be no groove. Mostly the circles are incomplete or stop short of the groove, but in others they are complete and join the groove. This form distinguishes these sculptures from all others.

Sometimes there is only one circle, often three or four, and in one case there are eight. The diameter varies from 2 inches to 39 inches. Some are true circles as if drawn with the help of an instrument, but most are irregular in outline, some being

bulged in breadth, others lengthened and pear-shaped. Usually the groove is straight, but sometimes curved and wavy, and often extends beyond the outer circle; very generally it is down the slope of the rock, but occasionally across the slope. Three detached circles, each round a cup, are united by grooves, so as to give a rude resemblance to a plant with its stem, branches and flowers. With a few exceptions these sculptures are marked by a family character, yet, though 55 different inscribed stones have been discovered in Northumberland, no two of them are alike.

III. CHARACTER OF SCULPTURING.

All the figures are incised on sandstone; some are but little below the surface, others half an inch; the average is about a quarter of an inch. Hollows are deeper, up to $1\frac{1}{2}$ inches. The original character of the sculpturing is best seen on stones recently cleared of peat-cover. They appear to have been rudely executed. The circles, grooves and hollows have been chipped out by pointed tools, some of which had been blunter than others, and the toolmarks are in such cases distinctly visible, while the edges of the figures are rough and jagged; but the material of which the tool was made is not determinable by the sculpturings themselves.

The number of figures on each stone is very different; on some there is only one, but on the Routing Linn stone sixty figures are traceable.

IV. DISTRIBUTION IN NORTHUMBERLAND.

The distribution of rocks in Northumberland is interesting. They do not appear either on the Cheviots or on their flanks, for here there are numbers of forts, dwellings and sepulchres of the same character and age as those associated with the inscribed stones. It might therefore be inferred that no sculptures are to be found on the porphyry of the Cheviots, because the rock was intractable under stone tools.

The inscribed rocks occur on one or other of the beds of thick sandstone which is near the base of the mountain limestone formation and which forms the substratum of the high moorlands of Northumberland, rising in some cases to 1400 feet

above sea-level. On the rough surface of the rock, where it crops out in different platforms on these hills, these sculptures are found.

In the north-west part of the district they occur on the upper surface of the cliffs near Routing Linn, six miles north of Wooler; they are scattered in great profusion on the ridges in the moorland at Harelaw, Horton and Doddington, and on Gled Law; they are on the outbreak of rock at Cuddy's Cove; Old Bewick Hill, Chatton Law, Whitsunbank; Beanley and North Charlton Moors; and at Cartington Cove, near Rothbury.

V. DESCRIPTIONS OF THE ROCKS.

It would take too long to quote the details of all the stones recorded by Mr Tate, but those of the great stone at Routing Linn, though not the first discovered, should be described, as it is the most northerly in situation and contains the largest number and greatest variety of figures (fig. 2).

It is the largest of all the stones discovered, and yet it is only a fragment, for part has been quarried away on the south side, where it rises ten feet above the ground; from west to east it is 60 feet long and 40 feet at its broadest part. Untrimmed by art, it is rough as Nature has left it, and yet over all parts—over ridges and hollows as well as over smoother places—the mysterious figures have been incised. How many there may have been originally it is impossible to say; 55 are traceable on its north and west slopes, and five more on its deeply guttered south aspect.

Most of the figures are typical forms. One has a hook-like process at the side; one an arched figure like a recessed Gothic doorway; concentric circles with two or three grooves issuing; horseshoe forms, and a singular figure with nine radiating grooves from the top of the outer circle. One outer ray is directed south 20° east, the other south 15° west, and the middle ray south by east. Some of the compound figures are peculiar—the plant-like one already referred to; there are two circles a little apart united by a groove passing from centre to centre which is somewhat like the “spectacle” ornament on Scottish sculptured stones; two circles with long tails uniting and ending in cups, and which might represent comets. The figures have

a more artistic appearance than most others, partly due to the care with which they have been formed, and partly to the moulding action of the weather. In size, the figures range from 3 inches to $2\frac{3}{4}$ feet in diameter.

This marvellous rock is within an ancient British Camp, which occupies an angle formed by the bed of the Routing Linn Burn, and is defended on the north and west sides partly by deep gullies, and on the other by four strong rampiers and ditches. Like some other camps of the same age, it has attached to it a large area enclosed by a supplemental rampier, and it is within this area, about midway between the camp and the external rampier, that the inscribed rock stands. About 100 yards northward is a barrow, under which were interred the remains of some ancient Briton, to whom the mysterious inscriptions had a definite meaning.

A rock at Hunter's Moor (fig. 3), about a mile north-west of Routing Linn, has considerable interest, since on it there are circles, cups and combinations of figures resembling those on a rock at Stonehaven, Kincardineshire, thus leading to the conclusion that it, too, belongs to the same family and age. Several barrows in the moorlands were opened by Rev. Mr Greenwell and contained evidence that they were the burial-places of the ancient British people. An important discovery by him in Ford West Field, one mile west of Routing Linn, was a typical figure of three incomplete concentric circles round a cup, on the under surface of a cist-cover; and another cist-cover near by was sculptured with several hollows or cups. These cases are of interest, because connecting the sculptures with the dead.

About a mile south of Harelaw Crag on the Horton grounds, in a similar outbreak of rock, there are several inscriptions. Some of the figures present new features: one form of four concentric circles has six cups within the inner circle, and two parallel curving grooves issue from the second circle.

The incised rocks on Dod Law appear partly on the summit and partly on lower outbreaks of rock in the escarpment of the hill. About thirty yards east of the camp is a very peculiar inscribed stone, because it contains forms differing considerably from the common type. It was almost entirely covered over with turf till 1855, when it was observed by Mrs Proctor, who caused it to be cleared (fig. 4). The abnormal figures are rude,

irregular squares: one of them with three incomplete concentric squares around fourteen hollows, from one of which proceeds a groove to another cup, and then away through an opening in the squares to the extremity of the stone. Another singular quadrangular figure encloses eight cups, and has a groove passing through, but forked at its commencement and starting from two different cups. Imaginative speculators might in these figures find countenance to the notion of the inscriptions being plans of camps, for one could fancy there were camps with one and three rampiers, a gateway through them, hut dwellings scattered over the area enclosed, and a hollow way leading out of the camp. The shape, however, of this imaginary camp does not correspond with those of the period. So different are these figures from other inscriptions that they might have been referred to a different age and people; but their association with other figures of the normal types show their common origin. Twenty-four figures are traceable on these stones.

Lower down the escarpment of Dod Law a mass of red sandstone twenty feet high projects from the steep hillside; in this is a small cavern called "Cuddy's Cove." On the scarp of the rock where it dips into the hill four circular figures are traceable. On the perpendicular western face of this rock several strange inscriptions, different in form from the typical figures, were first discovered by myself in 1854; among them appears a cross *with, in the centre, two concentric circles round a cup*, and a form like a mediæval letter M. I believe them to be archaic, but it may be doubted whether they are of the same age as the figures on the top of the rock.

All the inscriptions already described (*including very many more omitted in these notes*) occur in the ancient province of Otadani; but a discovery made by myself in 1860 extended their range into the country of the Gadani, another of the ancient British tribes. Lying among a heap of stones in a Jedburgh garden (Adam Matthewson), I detected, on a much weather-worn block, defaced sculpturing of the same family character as those in Northumberland. There are five concentric circles, central cup, radial grooves, and a string of cups round the outer circle. Forty years ago this stone had been built into the wall of a house; whence it originally came is not known, but probably it had been connected with an internment.

VI. SUMMARY OF NORTHUMBERLAND INSCRIPTIONS.

In a summary Mr Tate writes: I find that 53 sculptured stones have been observed in Northumberland, and that there are inscribed on them about 350 figures. All are more or less connected with ancient British remains. Four of them formed the covers of cists and four were probably covers; two are within a few yards of barrows beneath which are similar small sepulchral chambers; five are within ancient British camps; eight are not more distant from such camps than 100 yards; most of the others are less distant than half a mile; and none further away than one mile. Their relation to the huts, camps and hut-circles is, however, more apparent than to the sepulchres.

VII. INSCRIBED STONES IN OTHER PARTS OF GREAT BRITAIN.

The localities where similar inscribed stones have been found is important, for the more extended the range of observations the sounder is the basis for forming an opinion as to their age and meaning. *Names only of places; Mr Tate's details of figures, etc., are omitted.*

Coilsfield, Ayrshire; Kirkcudbrightshire; Forfarshire; near Kirkwall, Orkney; Carn Baan, Crinan, Argyll (fig. 5); Ardri-shaig, Argyll; Penrith, Cumberland; Pickering, Yorkshire; Dorchester, Dorset; Peak of Derbyshire; Ireland.

VIII. BY WHOM AND AT WHAT PERIOD WERE THE INSCRIPTIONS MADE?

Their wide distribution over the British Islands evidences that when they were made the whole of Britain was peopled by tribes of one race, who were imbued with the same superstitions, and expressed them by the same symbols. The opinion has been maintained that they were the work of Roman soldiers, but no Roman relics of any kind have been found in connection with them, nor do such rude incisions possess any of the characters of Roman workmanship. Besides, neither Ireland nor the Orkneys were ever trodden by the foot of the Roman.

The invariable association of these inscriptions with ancient British forts, villages and sepulchres is evidence of all having

been the work of the people who dwelt there and were buried in these tombs. The proof has been cumulative; it amounts to a demonstration when we observe at Ford West Field, Black Heddon, Craigie Hill, Lochgilphead and Kerry, typical symbols incised on the covers and side stones of cists; for these sculptures could not have been of later age than the interments, though they may have been earlier quarried from a sacred inscribed stone in the neighbourhood, and placed over or in the cist to give a sanctity to the resting-place of the dead. Therefore they are pre-Roman, and may date backwards not less than 2000 years, and I am inclined to believe some 500 or 1000 years more; because the relics of the period indicate a low degree of civilisation and would carry us back to the early immigration of Celts into Britain.

Stating that "ancient British" is a general phrase, Mr Tate refers to a possible prior race of still lower civilisation which had been driven away or exterminated by an irruption of Celts, but he states that the question is difficult to determine.

IX. THE KIND OF TOOL USED: STONE OR METAL?

The markings have been chipped or picked out and are not made by rubbing; the best-preserved ones show that the tool was bluntly pointed. All our sculptures are in sandstone, which could have been incised by such a tool as was used in far-distant prehistoric times, made of basalt, flint, hornstone, trap or jasper. Metals, however, were known in the district when the sculptures were incised; bronze and copper objects have been found in their neighbourhood, and in some parts of North Northumberland considerable numbers of bronze celts have been found as well as bronze daggers, spearheads and swords. Querns made of hard, intractable porphyry have been taken from the forts about Yevering, but as these could not have been fashioned by any stone tool, it is therefore probable that metallic tools had been also used to inscribe the rocks. This is corroborated by the character of the Argyll rocks, which are so hard that stone tools could not have chipped out the inscriptions. Probably the metal was bronze, which seems to have been in considerable use at the period.

X. WHAT MEAN THESE SCULPTURES?

Are they merely ornamental? Or are they symbolical, and if so, what kind of sentiment or thought do they represent? If they were ornaments merely, still they would be of great interest as the first efforts of infant art among its aboriginal inhabitants.

Numbers of them by no stretch even of the wildest imagination can be likened to camps. The numerous additional facts observed confirm the conclusions, first, that these inscriptions have been made by the Celtic race occupying Britain many centuries before the Christian era; and, second, that the figures are symbolical—most probably of religious ideas.

Look at the extent of their distribution and then say what could induce tribes, living hundreds of miles apart and even separated by the sea, to use precisely the same symbols, save to express some religious sentiments, or to aid in the performance of some superstitious rites. Beyond these general views we would wander into the regions of fancy and conjecture.

There are no traditions in Northumberland respecting these inscriptions; indeed, until discovered by Mr Langlands, their existence was unknown to the present generation. Reference there is to inscribed stones in the Welsh Triads, which say that on the Stones of Gwidden-Ganhebon "one could read the arts and sciences of the world; the astronomer Gwydon ap Don was buried at Carnarvon under a Stone of Enigmas."

Following out the idea of the inscriptions being religious symbols . . . and another purpose being that of connection with the dead . . . the Rev. William Procter, of Doddington, considers that the incised blocks are monumental inscriptions. As he has carefully investigated them he sent me his opinions in writing: "I am decidedly of opinion that they are monumental inscriptions in memory of departed friends whose remains had been deposited near them. The oldest monuments in our churchyards bear no verbal inscriptions, and it is not likely that these far more ancient monuments aimed at verbal inscriptions. As in our old churchyard monuments, the sword, the shears, the cross, are emblematical of the sex, profession and faith of the departed, so it is pleasing to think that the pre-

vailing figure of the circle in these engravings in the rocks may have been designed to symbolise the immortality of the soul.

“Or, the central dot may indicate the individual deceased, the surroundings have reference to his family or temporal circumstances, and the tract from the centre through them may indicate his exit from this round world and its employments. The Druids were astronomers and Sun-worshippers.”

Mr Tate concludes his article with references to the Ogham characters as the possible Celtic alphabet, inscriptions of which occur frequently in Ireland and some in Scotland. Characters are visible on one of the megalithic standing-stones at Kilmartin, north of Ardrishaig, and on a stone on Raedykes Moor, near Stonehaven. On one of the Northumberland rocks there are lines similar to Ogham; nine straight lines appearing like rays are incised above the outer circle of one of the figures on the Routing Linn rock.

Before, however, more definite results can be arrived at, further investigations must be made in other parts of the world. Something, however, has been achieved—materials for aiding in the fuller solution of the problem have been placed on record, an advance starting-point made for future inquiries, and a description and representation preserved of marvellous sculptures which time and the elements will eventually obliterate.

Since the original discoveries were made in 1824, inscribed stones have been recorded by various members of the Club at some thirty places in Northumberland, whose location can be found in volumes of the Club's History.¹

In an article² by Miss Russell, Ashiesteel, on “British and other Coins older than the Roman Conquest of Britain,” there is a plate showing coins, on some of which there are circles round cups. Whether these designs have any connection with the figures on the inscribed rocks is a matter for argument. Miss Russell states:

No. 10. This coin has on the convex side a device much resembling the spectacle-ornament of the Scotch sculptured stones, and, so far, bearing out Mr Campbell's suggestion that it is meant for the Sun and Moon joined by two Crescents. The crescents are very distinct, while the orbs have been reduced to two small circles with dots in the centre; the concave side

¹ J. Hewat Craw, F.S.A.Scot.: Index of Volumes I-XXVII (1831-1931).

² *Ber. Nat. Club*, vol. x (1882-84).

has the horse . . . and a circle and dot like those on the other side. I observe that circles like these on the coins, etc., occur ornamenting the ground of Etruscan paintings; and it is suggested that if they are meant for the Sun, it is the sun regarded as an Eye, which would explain this form.

No. 11 has a sort of double variation of the same device, though, seen by itself, it looks like a concatenation of comets.

Since the above notes were collected and just as the article was going to press, my attention was drawn, while visiting Warkworth, to another set of sculpturings which are a feature in themselves. Briefly, their situation "is quite different from those referred to by Mr Tate as occurring on the surface of sandstone rocks, protected by layers of turf, and cropping up on hills or other high ground well inland. These are at Morwick, on the face of a sandstone cliff rising perpendicularly from the bed of the River Coquet, a very short way above the level of the sea. There is no radial groove, and in the most definite there is a spiral form."

They were discovered in 1877 by Mr Middleton Dand, of Hoxley Hall, and are referred to by Dr Hardy.¹

¹ *Ber. Nat. Club*, vol. x (1882-84).



[Photo Edward Miller]

JENNY LANTERN'S HILL.

Fig. 1, page 130. Inscribed Rock at Jenny Lantern's Hill, Northumberland, discovered 1948 by Mr Edward Miller, East Bolton, Alnwick.



ROUTING LINN.

Fig. 2, page 135. Inscribed Rock at Routing Linn, Northumberland (original scale $\frac{1}{4}'' = 1'$). Photo reproduction by H. H. Cowan of Plate I in vol. v, *Ber. Nat. Club History*.

[To face p. 142.]



HUNTER'S MOOR.

Fig. 3, page 136. Inscribed Rocks at Hunter's Moor, Beanley, Northumberland, and Argyll.

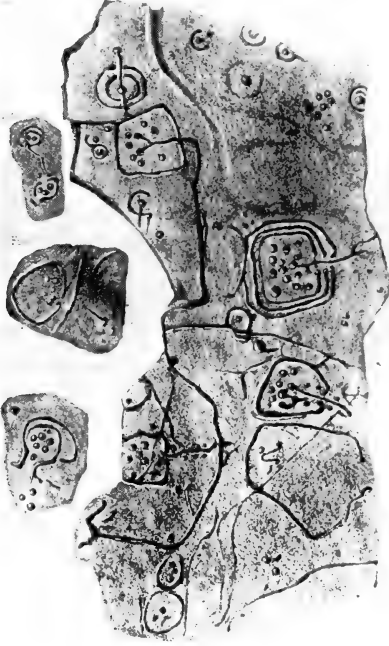
Nos. 1 and 2. Hunter's Moor; Rubbings by Wm. Procter, Jr.

No. 3. Beanley.

No. 4. Standing Stone near Lochgilphead; Sketch by Professor Simpson.

No. 5. Lochgilphead.

Photo reproduction as above of Plate II in above.



DOD LAW.

Fig. 4, page 136. Inscribed Rocks at Dod Law, Northumberland.
Nos. 1, 2, 3 and 4. Dod Law.

Photo reproduction as above of Plate VI in above.



[Photo H. H. Cowan

CARN BAAN.

Fig. 5, page 138. Inscribed Rock at Carn Baan, near Lochgilphead, Argyll.
Original photo by Sir Alexander Ogston, K.C.V.O., Aberdeen.

[To face p. 143.

NOTE ON WHORLS, FOLLOWING ON DISCOVERIES AT LONGFORMACUS

By H. H. COWAN.

THE two whorls (illustrated by author's photograph, plate 12) were found by Mrs Pate, Horseupcleuch, Longformacus (right), and by Mr J. S. Leitch, Longformacus (left), the first in a field near the site of the Nunnery. It is suggested that this may have reference to "Nun's Walls, on Horseupcleuch," near which was a grave supposed to mark the place where two Cromwellian soldiers were killed. The second was found many years ago at Cranshaws, lying on the top of a mole-hill.

Actual size, $1\frac{1}{2}$ inches diameter.

Both the whorls were sent in to the National Museum of Antiquities, Edinburgh, for comment, and the following notes were received from the Director:

"Whorls were, I understand, used over a very long period from Roman times to last century. They acted as a sort of fly-wheel on the wooden spindle for making thread by hand. I don't think the process is to be found nowadays anywhere in the British Isles, though I have seen it being done in Brittany.

Naturally, being used for an ordinary domestic purpose over such a long time, whorls are pretty common. Most, that have survived at any rate, are of stone, though bone and wood are known, and we even have a specimen in the Museum made from a potato.

Very little is known about variations in design, and few can be attributed to particular periods. I am afraid I haven't the least idea how old the specimens from Longformacus might be. The one that is polished is unusual and interesting in view of the carefully polished surface, and also because it seems, to my eye at least, to bear signs of having been turned on a lathe. I am keeping it for a week so as to consult the Geological Survey about its material." Later, Mr Stevenson reported: *"It is undoubtedly a local rock, which can be matched almost exactly with some of the porphyry dykes of the Lammermuirs. It also resembles very closely the*

Samidine trachyte at Dirrington. But there are many outcrops of this type of rock in the Lammermuirs, and they do not vary very greatly."

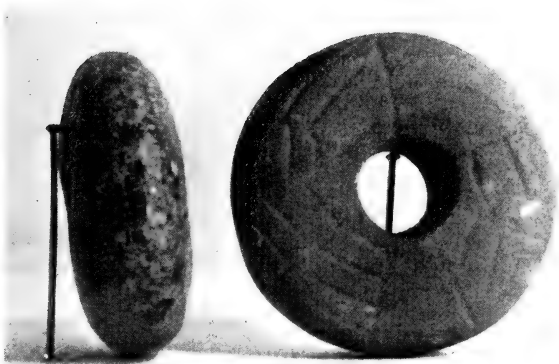
The first mention of whorls being found by members of the Club is in 1862, when *Mr Ralph Huggup* showed a number of flat circular perforated stones found at *Shorestone*: such have generally been regarded as weights for ancient spindles. After an interval of eight years, *John Turnbull, Abbey St Bathans*, found a stone whorl of $1\frac{3}{4}$ inch diameter, flat on one side but rounded on the other, and the latter ornamented with circular grooves cut in it. Whorls of this shape were fixed on the end of the spindle to prevent the thread wound on it from slipping off.

Through the '70's these objects were found at different places in the Borders, their description varying and including "the whirl of a distaff," at *Maxton*; "a whorl of burnt brick earth," at *Penmanshiel*; "two spindle-whorls made of slate," at *Mossilee Hill, Galashiels*; and "two spindle-whorls," at *Ashisteel*. Of the last, *Miss Russell* states: "These so little indicate remote antiquity if found by themselves that the ploughmen recognised them as what used to be employed in spinning with the distaff: one is a flat disk, the other convex on one side and ornamented with a circle round the hole. They are of two different kinds of stone, both common in the country."

"A slate spindle-birle marked on the sides with incised concentric circles" was found at *Overhowden, near Oxtou*; "two distaff spindle weights," at *Braidhaugh, Bonchester*, and at the *Chester on Roundabout Farm*; "a stone whorl," in the wall of a chamber in *Edin's Hall*.

An interesting description is recorded of one found in 1880: "Mr *Watson* showed a spindle-whorl painted black, which is labelled: 'Stone for keeping witches off cattle, brought from *Billie* in 1748 to *Bankhead* by *John Landells* (1834).'" And another in the same year at *Overhowden* is described as "a flat, slate spindle-whorl found exactly on the circle of the 'Rings' there, called the 'Rings Field.'"

Several spindle-whorls were picked up at the *Camp on Earlstou Black Hill*; and two Collections of 25 and 9 found in *Lauderdale* are reported on by the *Museum of Antiquities, Edinburgh*.



[Photo H. H. Cowan

WHORLS FOUND IN NEIGHBOURHOOD
OF LONGFORMACUS.

[To face p. 144.

NOTE ON A SHORT CIST DISCOVERED AT FLOORS, KELSO.

By R. W. FEACHEM.

A CIST was revealed during ploughing operations in the field known as Wester Anna on Floors Home Farm, Kelso. By arrangement with Mr Hunter Murray, Factor to His Grace the Duke of Roxburghe, an examination was made on 11th March 1948. The cist was 35 yards north-north-east from the larch tree marked on the 6-inch O.S. maps near the middle of a straggling belt of deciduous trees which runs across Wester Anna. The cover-slab, 5 feet 7 inches long, 2 feet 2 inches wide and up to 6 inches thick, was removed by the ploughman, who had fouled it some 10 inches below ground-level. The cist, orientated north-east-south-west, was made up of four side slabs, these and the cover being of laminated sandstone. It measured, internally: north-east, 2 feet; south-west, 1 foot 5 inches; south-east, 4 feet 1½ inches; north-west, 4 feet. At a depth of 18 inches from the level of the tops of the side slabs was a pairing of flat ovoid water-worn pebbles. The ploughman had shovelled out the contents—the skeleton of an elderly male and fine infiltrated sand. No relics were found.

A GROUP OF RELATED PLACE-NAMES.

By GEORGE WATSON, M.A., F.S.A.Scot.

AN interesting Border place-name which deserves more than passing notice is that of Rowchester. Its congeners and their affinities present an interesting group of land-names harking back to early times, with reference to earthworks that existed much earlier still. The names involved are Rowchester (two different instances), Rudchester or Rutchester, Rewcastle or Ruecastle, and Rough Castle.

Put in a nutshell, so to speak, all of these names involve or can be explained etymologically by (1) the word *rough* in its original form (Anglo-Saxon *rūh*) or an oblique case of that word, especially as applied to rough ground; and (2) *chester* (Anglo-Saxon *ceaster*), often used, especially on the Borders, to denote a prehistoric or fortified place (as was Chester, in Cheshire, garrisoned by Romans). The word comes ultimately from Latin *castra*, the source also of (3) our word *castle*, a term which is often applied to ancient British earthworks, as the fortification on Castle Hill (Ancrum, and elsewhere), Castle Law (Venchen), etc.

The first example in this group is Rowchester, which designates a place lying between Kippilaw House and the Selkirk highroad. Here are some ancient earthworks (presumably Old British) from which the place derives its name. In the late sixteenth century the name is found in the forms Rouchister and Routhister, and in a seventeenth-century retour as Rochester.

Rowchester House, pleasantly situated about a mile south-east of Greenlaw, embraces our second instance. In its spacious grounds stand some vigorous coniferous trees, described in the Club's *History* (vol. ix, pp. 548-549). A charter given under the Great Seal in the year 1529 shows the name as Rutchester; and so also it appears in a retour of the late seventeenth century. Although there is no trace of earthworks near by, so far as the

6-inch O.S. maps show, the laws of place-name evidence indicate that such remains (probably an Old British camp) once existed here. If so, they may have been levelled during agricultural operations.

Though disguised in form, the Northumbrian Rudchester (*History*, vol. xxvii, pp. 60-62) is etymologically the same word. It is found also as Rutchester (the dentals *d* and *t* being developed before *ch*), Rouchester, and also (as early as 1348) Rowchestre. Such are the name-forms of a township in Heddon-on-the-Wall, situated about nine miles west-north-west of Newcastle. Here stood the Roman station of Vindobala, whose remains are, or were recently, still traceable.

For the reasons given at the beginning, Ruecastle (*History*, vol. xii, p. 74) has the same signification. In the late twelfth century it is found as Rughechestre, in the late thirteenth as Rucastel, in the early fourteenth as Roucestre. That the guttural persisted is proved by the form "Rouchcastell" (1642); but the form from the fifteenth century has been chiefly Rowcastle (*History*, xxiv, p. 41), altered under the influence of Stobie's Map (1770) to Ruecastle, thus established as the preferred form. Again the etymology of the name strongly indicates that a camp or fort stood here in ancient times, though even the 6-inch maps give no indication of this. But rough ground immediately east of the farm steading presents every appearance of its being the scattered remains of the original "rough castle" or camp.

Finally, Rough Castle also is explained in the opening paragraphs. Rough Castle is the thirteenth fort on the line of the Antonine Wall, and need not be further described here. There is apparently a Rough Castle beside a moss on the border of Rimside Moor (see *History*, vol. xii, p. 453), which, I presume, is the existing or former site of an Old British camp.

SONNET ON JOHN BISHOP (1863–1935).

By T. MCGREGOR TAIT.

BEHOLD compressed in Earth's embedded book,
Besmeared with blood and pierced by predal spears,
Those forms cast off when in the primal years
Spasmodic sobs the macrocosm shook.
By wisdom won from star and flower and brook
Subdued the subtle subman's numbing fears;
Henceforth self-ruled his steadfast course he steers,
With modest mien the edge off knowledge took.

Who knows a Planner? or if Purpose can
Sublie that gleaming Universe sublime?
What moral law save in the mind of man,
Or Final in infinity of Time?
He taught his faltering fellows how to scan
That long climb upward from primeval slime.





A colony of *Spartina Townsendii* (Rice Grass) at the south-west end of Holy Island Slake, January 1949.
(Ross Farm in distance.)

[To face p. 149.]

A SUCCESSFUL EXPERIMENT.

By SIR WALTER AITCHISON, M.A., F.S.A., F.S.A.Scot.

The following note, dated 22nd March 1949, has been received from Sir Walter Aitchison. It appears of sufficient importance not to be held over, as in point of date it should be, till next year's *History*:—

“In 1929 several hundred seedlings of *Spartina Townsendii* (Rice Grass) were planted experimentally on the foreshore of Elwick Farm, at the south-west corner of Holy Island Slake.

It was not known at that time whether the *Spartina* would be hardy on the north-east coast. In fact, the odds were against its being so. So far as I know, its natural range is along the south coast only, where it fills the foreshores of such harbours as Chichester and Poole.

After several years ‘sulking,’ the plants eventually made up their minds to take hold and grow, and I enclose a photograph of their present condition.

They now cover several acres, and the colony is spreading in three ways—(i) vegetatively, (ii) by seed, and (iii) by water-worn pieces obtaining anchorage at a distance and taking root. The height attained is only about half (*i.e.* 30 to 35 inches) that reached on the south coast, and seed seems to ripen only in unusually hot summers.

This, I think, is a matter of considerable botanical interest—and even of ‘social’ interest—as the *Spartina*, in suitable circumstances, is a useful land-maker.

Its establishment in the neighbourhood of the Club’s activities is probably worth recording.”

ORNITHOLOGICAL AND OTHER NOTES.

ORNITHOLOGY AND ZOOLOGY.

Date in 1948.	Species.	Seen by	Place and Remarks.
Jan. 2.	Pair of Hooded Crows.	G. Hastie, Coldstream.	Near Lowick.
Jan. 5.	1 Snowy Owl.	R. B. Bell, Northfield.	On Coldingham Moor.
Jan. 7.	3 Whooper Swans.	A. M. Porteous, Coldstream.	In flight over Coldstream.
Jan. 18.	5 Grey-lag Geese.	D. G. Brown, West Learmouth.	Feeding on grass fields at West Learmouth, Cornhill.
Jan. 20.	Flock of Bramblings.	A. M. Porteous.	Feeding near Reston.
Jan. 21.	1 Great-crested Grebe.	„	On Tweed at Coldstream.
Jan. 29.	1 Stoat (full winter coat).	„	Birkenside, Earlston.
Feb. 14.	1 Kingfisher.	„	Lees Water, Coldstream.
Feb. 15.	1 Great-crested Grebe.	„	On Tweed at Coldstream.
Feb. 17.	1 Stoat (full winter coat).	„	Skaithmuir, Coldstream.
Feb. 23.	5 Oystercatchers.	„	Return to Lees Water, Coldstream.
Mar. 7.	1 Pintail Duck.	„	East Learmouth, Cornhill.
Mar. 21.	1 Greenshank.	„	Bank of Tweed, Coldstream.

Date in 1948.	Species.	Seen by	Place and Remarks.
Mar. 25.	Rooks' nests.	A. M. Porteous.	Three nests built, one above the other, in top structure of pylon at Coldstream Bridge.
Aug. 16.	Girl Bunting.	Miss Briggs of Thornington.	Male bird seen feeding young in nest at Thornington, Mindrum. The bird allowed of a very close approach. The nest was placed in a whin bush.
Nov. 13.	1 Long-eared Bat.	A. M. Porteous.	In flight at Velvet Hall.
Dec. .	1 Stonechat.	„	Seen at Grindon near Norham with two other birds, probably of the same species, but only one definitely identified.
March } April }	2 Jackdaws, chocolate-brown.	Mr and Miss Pape.	Near Thornton Park. Birds very tame. A specimen of this abnormal colour was exhibited to the Club in 1895.
Mar. 7.	1 Kingfisher.	Col. Logan Home.	On Whiteadder near Cumledge. The only one seen since the hard winter, 1946-47. Will other members please report any seen?
Apr. 1.	1 Oystercatcher.	„	On Whiteadder at Edrom.
Apr. 17.	3 Hooded Crows (grey).	„	On Coldingham Moor. Probably migrants from N. Europe.
June 1.	2 Magpies.	„	Near Grantshouse. Will members please report any others seen?

Date in 1948.	Species.	Seen by	Place and Remarks.
June 17, 18, 19, and July 29.	1 Jay.	Col. Logan Home.	The first of its kind to be seen at Edrom. Will members please report any others seen? This jay was "mobbed" by small birds, such as tits, willow - wrens and chaffinches, as it hunted about in the bushes.
July 13.	1 Merlin ♀ (juvenile).	„	On road near Drake-mire.
July 24.	1 Hawfinch ♂ (juvenile).	„	In Edrom garden, eating stones of gean. Will members please report any others?
July 3 and Sept. 18, 19.	1 Marsh Tit.	„	In Edrom garden. Will members please report others seen and whether nesting?
Nov. 18.	Long-tailed Tits (party of 10).	„	In Edrom garden. Will members please report whether this bird is noticeably less common since 1947?
Dec. 1 and 4.	Small flock of Bramblings.	„	In Edrom garden.
Dec. 18 and 19.	10 Goosanders (♀♀ and juv. ♂♂).	„	On Whiteadder at Edrom.
Dec. 25.	1 Red-throated Diver.	„	On Tweed, below old Bridge at Berwick.

ENTOMOLOGY.

Date.	Species.	Seen by	Place and Remarks.
1946. Sept. 24.	2 "Tissue" Moths (<i>Tri- phosa dubi- tata</i>).	Col. Logan Home.	Edrom House. These moths came into the lighted rooms at night.
1948. Mar. 26.	1 Camberwell Beauty But- terfly.	A. M. Porteous.	Feeding on Aubretia at Thurston Mains. From colouring of insect it would appear that this was a British- bred specimen.
Apr. 23.	2 "Tissue" Moths (<i>Tri- phosa dubi- tata</i>).	Col. Logan Home.	Edrom House. These moths came into the lighted rooms at night. Both these moths are rare in Scotland, par- ticularly <i>E. certata</i> , the larva of which feeds on <i>Berberis vul- garis</i> , of which there is a quantity in Edrom garden.
May 21.	1 "Scarce Tis- sue" Moth (<i>Eucosmia(c) certata</i>).		

REPORT ON MEETING OF BRITISH ASSOCIATION AT BRIGHTON.

By MRS J. BISHOP.

SOME 2000 scientists gathered at Brighton for the 110th meeting of the British Association for the Advancement of Science—exactly half the number present at Dundee the previous year. I have attended this meeting as delegate for many years now in many and varied places, and I am forced to admit to myself that the least successful meetings are those held in such—dare I say it?—trippery spots as Blackpool and Brighton. My experience at Brighton caused me to marvel at the incivility of some of the people I met—mostly tram conductors who at times gave such pert answers when asked a polite question. They contrasted unfavourably with the courtesy and kindness of the men on the Dundee trams, where, by the way, we rode free of charge. I lived a long way from the centre of things, and had occasion to drive to and fro sometimes twice a day. Boarding a bus or tram one morning, I asked to be let down at the College. “What College?” said the man. “On the Front.” “There’s scores of Colleges there,” he replied. I pointed out quietly that I was a stranger, and that I had attended this meeting in many towns and never had met such rudeness as in Brighton. He said he liked a little joke at times. I remarked that a joke was no longer a joke when it hurt one’s feelings.

As usual, it was just impossible to be present at all the meetings and to hear all the interesting papers read. I will deal at some length with the Presidential Address, which was peculiarly suited to the times in which we live; also upon the interesting discussions which it provoked, giving the opinions of several noted scientists.

I would do well to mention (and fain would I enlarge upon them) the clever and popular papers on “Problems of Old Age,” on Friday, 10th September, forenoon and afternoon, in which the Sections of Anthropology and Archæology, Physiology and

Psychology, were united. Herein were included "The '60-65' Convention," by Sir Ernest Rock Carling; "Medical Care and Welfare of the Elderly Sick and Infirm," by Dr Marjory L. Warren; and "Some Economic Implications of an Ageing Population," by Miss Barbara Lewis.

It was impossible to enter the crowded Lecture Room in the forenoon, but I was well in the front of the queue for the afternoon session. My only regret was that I had been elsewhere in the morning. Distances were great between the various lecture rooms—time was lost finding the way—and "to travel hopefully was a better thing than to arrive."

Sir Henry Tizard, K.C.B., F.R.S., President of the Association, delivered his Inaugural Address, "Faith in Science," before a large assembly in the Dome on the evening of 8th September. He recalled that it was seventy-six years since the Association had met at Brighton, and expressed its gratitude to the Mayor and Corporation for their welcome.

Sir Henry said: "The public estimation of science stands higher than it has ever done in this country. The Second Great War, which has been succeeded by an uneasy peace, grimly demonstrates that the country whose rulers neglect science is lost." He referred to Huxley's warning sixty years ago: "Science, like Tarpeia, may be crushed with the weight of rewards upon her. Let us then beware, when all men speak well of us, and be critical of ourselves. Let us ask whether we are claiming too much in some directions, and doing too little in others. Let us consider whether the great forces of science, on the proper exercise of which all social progress depends, are in balance."

It was with some such thoughts as these, said Sir Henry, that he had chosen the title of his Presidential Address.

"Deign on the Passing World to turn thine eyes,
And pause awhile from letters to be wise."

With this advice, given by Dr Johnson to the poor scholar in *The Vanity of Human Wishes*, the speaker invited his audience to consider to-day's predicament, for the world was passing from one state of unstable equilibrium to another. Unstable, because many years would pass before the realisation of the dreams of those who look forward to a world government which would bring not only peace, but happiness to all. But if it

must be an unstable equilibrium, they must strive to balance it, so that the chance of a major catastrophe be reduced to a minimum. Science had much to contribute towards that aim.

To give his subject a proper perspective, Sir Henry briefly surveyed the field of scientific achievement from 1885—a convenient date—the year of his birth, because it marked almost the close of the stagnant period when many men thought that our power to discover new experimental facts was practically exhausted. The shock caused by the exposure, in 1914, of our industrial shortcomings, which had been concealed by the apparent prosperity of previous years, led to a great increase of research by industry and by government; and under the influence of the great men of the inter-war period there was a surge of discovery which put Great Britain in the van of progress in nearly all branches of science. We became a scientific nation. But leadership in science and industry, research, allied to experience in commerce and manufacture, and to skill in craftsmanship, had not allowed our country to maintain its position among the nations of the world. Other nations with greater natural advantages would surpass us, and only by maintaining leadership in the application of science could we hope to keep our position among the great nations.

Sir Henry believed what was of first importance was to apply what was already known. He asserted that the production of power from atomic sources of energy could not bring such economic benefits to this country within twenty years as would the practical application of known methods of economising coal. In aeronautics, too, we needed bold and skilled engineering rather than fundamental knowledge; if it were successful, air transport, instead of existing precariously on subsidies, would compete on level terms with train and ship for long-distance passenger travel. A revolution in transport was in sight. Should we leave it to be accomplished by other nations, or should we show the way? The answer depended on whether we should encourage and adventure in engineering. Unless we could raise our standard of technology, unless there were many more men in executive positions in industry whose practical experience had been preceded by a scientific education, we should inevitably fail to keep our place among the great manufacturing nations. Should we argue that the main cause of

our relative decline was that research was on too small a scale, or should we seek for other reasons? The primary object of industrial research was severely practical; it sought to do something that had never been done before. The rate of social reform was set by the rate at which productivity increased; and social unrest was inevitable if reform lagged too far behind the advance of technology, or was pressed too thoughtlessly before it. The productivity of labour in this country was far lower than it might be if the results of past research were more resolutely and continuously applied. In the coal industry the results were painfully obvious—the coal raised by each man employed was now less than it was thirty years ago, when nearly all coal was hewed by hand. Research on building had been intensively pursued, but were better houses now being built with less labour than twenty years ago? If not, as seemed probable, research had had as yet little influence on practice.

We no longer had any outstanding natural advantages, and we must expect that, given approximately equal skill in technology, other nations with greater natural advantages would surpass us. Only by maintaining leadership in the application of science could we hope to keep our position among the great nations.

We were a healthier nation than in 1939. Whether we were as energetic was another question. The population of the world as a whole was increasing by one per cent. a year. It was extremely doubtful whether the supply of food could keep pace with even the present low standard of nutrition. War, pestilence and famine had kept the population within bounds since the dawn of history. War had ceased to be effective, pestilence was rapidly losing its power; only famine was left as a brake until education took its place. Was famine inevitable, or would science again come to the rescue as it had done before? So far as this country was concerned, we must plan our economy on the assumption that food would be dear and scarce for many years to come. There was a consensus of expert opinion that the production of food in the United Kingdom could be raised by 20 per cent. within five years, by a combination of measures such as the improvement of grasslands, the conservation of grass for winter feeding, the control of pests and weeds, the

extended use of fertilisers, and the development of large tracts of marginal land.

"We live, indeed, in difficult times," said Sir Henry in conclusion, "but they are very interesting times, and difficulties are bracing to a nation which has not lost the resilience of youth. It is a time for adventure and taking risks—calculated risks, of course, but not so nicely or so lengthily calculated that they are taken too late."

Many of the subjects raised in this Presidential Address came up for full discussion at the appropriate Sectional Meetings. Six Presidential Addresses were delivered. Dr G. Scott Robertson, President of the Agricultural Section, was prevented by illness from delivering his Presidential Address. It was read by Professor R. G. Baskett. He said that there was very serious danger of forgetting that the period of regional prosperity and freedom from want, which began nearly 150 years ago, was a very short period compared with the 10,000 years that preceded it, when famine stalked the world and no material progress was possible. Which was to be the normal future of the world? That was the problem which confronted us, and what the future would be depended upon the depth and width of unselfish thinking we applied to the solution. The period of plenty was passing, and man, as Lord Keynes had said, "does not die quietly." Gone were the days when it was possible to exchange the products of one to two industrial hours' labour for a hundred or more agricultural hours' labour. A solution to the problem of feeding the peoples of the world could only come by each country doing its utmost to increase its own agricultural output. American aid could be no more than a physician's stimulant. In India and China the problem was most acute, and it must be the aim of the U.S.A. and Great Britain to help those countries towards such a measure of industrialisation as would, together with a big expansion of agricultural output, raise their economic status.

Dr Scott Robertson stated that our present advantage lay in the incredible advance of science during the 150 years of plenty. If a peaceful world were to set itself the task of applying the knowledge we already had, it would be possible to double, or even treble, the production of food in a relatively short time. There had been stupendous losses. It had been

estimated that between harvest and consumption approximately 65 million tons of grain a year were destroyed by mites, pests and rodents—grain equal to all the food travelling into international trade. Science knew how to control these stupendous losses.

Sir John Russell (next year's President) spoke of the diminishing area of agricultural land which, in England and Wales, was now little more than half an acre a head compared with nearly one acre in 1891—and this with a steadily increasing population. Reclamation of some of the lost land was technically possible but financially difficult.

Professor Hilditch declared that the only real solution was in the development of oilseed crops on a sustained and very large scale. This was essentially a long-term undertaking. There was no short cut to the elimination of the present shortages.

An entirely different approach to the world food problem was made by Professor A. Fleisch, of Lausanne, President of the Swiss Federal Commission for Nutrition, who spoke of six years' experiment in war rationing and its results on the four million inhabitants of Switzerland. Statistics had shown the large amount of calories, proteins and fats, formerly considered essential, and which was attained in such countries as America, Great Britain and Switzerland, to be utterly unnecessary. "To-day," said Professor Fleisch, "when the great nations are suffering from shortages, if the world converted large quantities of wheat into eggs, thus losing 90 per cent. of the nutritive value, and used a tremendous amount of maize and barley as fodder, with a loss of 75 per cent. of calories and proteins, we must call that waste—a waste without any value for health."

Dr C. R. Fay, in the Economics Section, said: "The best use is not being made of food. Rotten cooking, rotten distribution of the family budget—that is where the food falls short of the original idea. It is not the lack of what the farmer can produce that threatens the national life. It is the lack of full use of the wealth that is at our disposal."

I was sorry to miss a lecture on 12th September by the Rt. Hon. Viscount Samuel on "Science and Philosophy." Wind and weather accounted for my absence; I had not been so wet since the Jutland battle. After a good lunch and a

fine tea with old companions who had traversed Canada and South Africa with me, in torrential rain, with a ragged umbrella, and dripping garments which did not dry for days, and by the aid of several kindly(?) bus conductors, I reached, after a struggle, my place of abode, a poor bedraggled creature, forgetting about Viscount Samuel, and feeling that Berwick is not the only place where floods exist!

MR ROBERT CARR, F.H.A.S.

SINCE the death last year of Dr A. H. Evans, Mr Carr has become the "Father" of the Club, which he joined in 1890. He is now aged ninety-seven, and although feebler in physical health than when he spoke to us on local geology at Cuddy's Cove in July 1939, maintains a keen interest in his special subject. As recently as last March he promised the Secretary a typed copy of a short article (previously submitted in manuscript) on "Submarine Canyons," with particular reference to the Teviot at Ancrum Bridge. This article, taken in conjunction with a longer one (printed in 1942), "The Glacier Age and its Effect on the Borders and Southern Uplands," will, it is hoped, appear in the next number of the *History*, to testify to the continued and wonderful vitality of our oldest member. That he may be spared to reach his "century" is the very sincere wish of us all.

Compiled by the Rev. A. E. SWINTON of Swinton, M.A., F.R.Met.S.

VOL. XXXI, PART II.

RAINFALL IN BERWICKSHIRE DURING 1947.

Compiled by the Rev. A. E. SWINTON of Swinton, M.A., F.R.Met.S.

Station.	St Abb's Head.	Tweedhill.	Whitchester.	Oxendean (Duns).	Duns Castle.	Manderston.	Swinton House.	Lochton.	Marchmont.	Cowdenknowes.	Dura- tion.
Height above sea-level .	212'	50'	823'	600'	500'	356'	200'	200'	498'	300'	Hours.
Month.											
January	2.65	2.09	3.69	2.98	2.84	2.86	1.79	1.61	2.42	3.71	46.9
February	1.36	1.37	2.96	2.63	3.27	2.79	1.61	1.44	2.71	1.79	73.4
March	4.68	3.87	4.69	5.18	5.89	5.19	3.93	3.87	5.74	4.20	116.5
April	2.69	2.13	3.15	3.36	3.57	3.59	2.72	2.76	3.43	4.65	111.2
May	3.22	2.61	3.31	3.03	3.06	3.28	2.83	2.99	3.27	3.90	54.4
June	1.70	2.49	2.36	2.57	3.04	2.70	3.33	3.86	2.89	2.41	62.6
July	1.75	2.82	2.03	2.49	2.25	3.06	2.74	2.47	2.73	3.44	53.5
August	1.10	.57	1.17	1.12	1.14	.20	.23	.23	.12	.20	5.0
September	1.09	.75	1.11	1.35	1.19	1.11	1.30	1.33	1.33	1.06	19.7
October	.75	.66	1.30	1.17	1.17	1.14	.80	.60	.97	.69	18.0
November	2.09	2.69	3.04	2.90	2.87	2.74	2.45	2.49	2.66	1.96	35.3
December	2.43	1.64	1.73	1.62	1.57	1.66	1.66	1.59	1.66	1.35	26.0
Year .	24.51	23.69	29.54	29.40	30.86	30.32	25.39	25.24	29.93	29.36	602.5

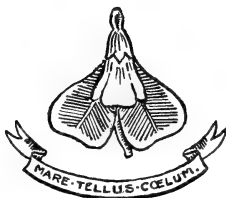
TREASURER'S FINANCIAL STATEMENT FOR YEAR ENDING 30th SEPTEMBER 1948.

RECEIPTS.		PAYMENTS.	
Credit Balance at 30th September 1947	£167 15 9	<i>Proceedings for 1947</i>	162 11 6
<i>Subscriptions</i> (including Entrance Fees and Donations)	202 14 9	<i>Printing and Stationery—</i>	
<i>Sale of Club Badges</i>	4 5 0	Neill & Co. Ltd.	£55 14 11
<i>Sale of Proceedings</i>	2 15 9	Martin Ltd.	8 14 3
		Berwick Advertiser.	0 17 8
		<i>Library—</i>	£85 6 10
		Rent of room and cleaning	1 0 0
		<i>Official Expenses—</i>	
		Secretary (H. H. C.)	£27 7 11
		Editing Secretary (A. A. B.)	1 10 0
		Treasurer (T. P.)	6 7 7
		Treasurer (H. F. M. C.)	1 16 6
		<i>Cheque Book</i>	37 2 0
		<i>Subscriptions—</i>	0 4 0
		Chillingham Wild Cattle Association	2 3 6
		Regional Council of British Archaeology	1 18 8
		British Association	2 2 0
		Credit Balance	6 4 2
			105 2 9
			£377 11 3

APPROXIMATE BALANCE SHEET.

LIABILITIES.	ASSETS.
Estimated Account for printing <i>Proceedings</i>	Cash in Bank on General Account . £105 2 9
Approximate Credit Balance at date	on Investment Account . 147 5 10
	252 8 7
	£252 8 7

30th September 1948.—I have examined the above Financial Statement with the books and receipted accounts, and find it correct. The Bank Pass-Book has been exhibited to me. (Signed) WALTER B. BAKER.



THE BERWICKSHIRE NATURALISTS' CLUB RULES AND REGULATIONS.

(Founded September 2nd, 1831.)

BADGE : WOOD SORREL.

MOTTO : " MARE ET TELLUS, ET, QUOD TEGIT OMNIA, CÆLUM."

1. The name of the Club is The Berwickshire Naturalists' Club (1831).
2. The object of the Club is to investigate the natural history and antiquities of Berwickshire and its vicinage (1831).
3. All interested in these objects are eligible for membership (1831).
4. The Club consists of (a) Ordinary Members, (b) Contributing Libraries and Societies, (c) Corresponding Members, eminent men of science whom the Club desires to honour (1883), (d) Honorary Lady Members, and (e) Associate Members, non-paying members who work along with the Club (1883).
5. New members are elected at any meeting of the Club by the unanimous vote of members present, the official forms having been duly completed, and the nominations having been approved by the officials of the Club. New members are entitled to the privileges of membership upon payment of the entrance and membership fees (1922), concerning which they will be duly notified (1937). If elected in September such member is eligible to attend the Annual Meeting for the year, no fees being due before 1st January (1937). The names of new members who have not taken up membership within six months of election, and after having received three notices, will be removed from the list (1925). The Club rules and list of members at date are sent on election (1937).

6. The entrance fee is 20s. (1937), and the annual subscription 20s. (1948). These are both due on election. Subsequent subscriptions are due after the annual business meeting, and entitle members to attend the meetings and to receive a copy of the Club's *History* for the ensuing year (1925). No fees or subscriptions should be sent until requested by the Treasurer (1937).
7. The number of Ordinary Members is limited to 400. The names of candidates are brought forward in priority of application, power being reserved to the President to nominate independently in special cases, irrespective of the number of members on the Roll (1884).
8. The *History* of the Club is issued only to members who have paid their year's subscription. Names of members who are in arrears for two years will be removed from the list after due notice has been given to them (1886).
9. The Club shall hold no property (1831), except literature (1906).
10. The Office-Bearers of the Club are a President, who is appointed annually by the retiring President; a Vice-President (1932), an Organising Secretary, an Editing Secretary, two Treasurers (1931), and a Librarian, who are elected at the annual business meeting (1925), and who shall form the Council of the Club (1931); with in addition one lady and one gentleman co-opted by the Council as members of the Council and one member (lady or gentleman) co-opted by the Council specially to deal with Natural History subjects (1948) as member of the Council, to serve for the ensuing year; they will retire at the Annual Meeting, but being eligible can offer themselves for re-election (1937).
11. Expenses incurred by the Office-Bearers are refunded. The Secretary's expenses, both in organising and attending the meetings of the Club, may be defrayed out of the funds (1909).
12. Five monthly meetings are held from May till September (1831). The annual business meeting is held in the beginning of October. Extra meetings for special purposes may be arranged (1925).
13. Notices of meetings are issued to members at least eight days in advance (1831).

14. Members may bring guests to the meetings, but the notices of meeting are not transferable (1925). Guests may only attend when accompanied by members (1937).
15. At Field Meetings no paper or other refuse may be left on the ground. All gates passed through must be left closed (1925). No dogs are allowed (1932).
16. Members omitting to book seats for meals or drives beforehand must wait till those having done so are accommodated (1925).
17. Contributors of papers to the *History* receive five extra copies.
18. The Secretary must be notified of any suggested change in Rules not later than the 1st of September in each year, all members having not less than ten days' notice of such (1937).

"RULE FIRST AND LAST."

"Every member must bring with him good humour, good behaviour, and a good wish to oblige. This rule cannot be broken by any member without the unanimous consent of the Club" (1849)—"Correspondence of Dr George Johnston," p. 414 (Founder and first President of the Club).

THE LIBRARY.

A complete set of the Club's *History*, publications of kindred Societies, and other local and scientific literature, are now housed in a large bookcase in the Public Library, Marygate, Berwick-upon-Tweed. (See Notice on the case.) Parts of the Club's *History* are in charge of the Club Librarian, Frederick Parker, 12 Castle Terrace, Berwick-upon-Tweed, and may be obtained "only on loan" by application to him. Parts are also on sale to Members or Non-members at the following prices. Extra copies (above three) are, to Members, 3s. 6d. per part up to 1920; to Non-members, 6s. (1906). From 1921 to 1933, to Members, 6s.; to Non-members, 10s. (1921). From 1934 to 1947, to Members, 5s.; to Non-members, 7s. 6d. From 1948 until further notice, to Members, 7s. 6d.; to Non-members, 10s. (1921); sister Societies and Libraries, 2s. 6d. Centenary Volume and Index, 10s. (1932). (When only one copy of year is in stock, it is not for sale.—F. M. Norman, Secy., 20/8/1906). Future prices to be adjusted by the Council from time to time in accordance with cost (1934).

THE PINK SLIP.

B.N.C., 1939.

1. Members are reminded that under Rule 15 no dogs are allowed at meetings.
2. Care should be taken that no paper or other refuse be left on the ground, and that wickets and gates be closed.
3. Smokers are requested to see that matches and cigarette ends are extinguished before throwing away, especially in woods.
4. During talks, members are asked to form a wide circle round the speaker, to enable everyone to hear.
5. When the attention of members is desired, the Secretary will sound the Horn.
6. The President's car (or car selected by the Secretary in his absence) will carry the Club Flag, and members are asked not to pass or get in front of this car, unless they are leaving the meeting.
7. Dr Johnston's "Rule First and Last"—
"Every member must bring with him good humour, good behaviour, and a good wish to oblige."

THE BERWICKSHIRE NATURALISTS' CLUB.

LIST OF MEMBERS, 1st January 1949.

Those marked with an Asterisk are Ex-Presidents.

LIFE MEMBERS.

	Date of Admission.
Craw, Mrs A. M.; 7 Riselaw Road, Edinburgh, 10 . . .	1933
Hope, Miss M. I.; Sudgrove, nr. Stroud, Glos.	1913

ORDINARY MEMBERS.

Aikman, John S.; Jedneuk, Jedburgh	1939
Aitchison, Mrs A. L.; Tweedmount, Melrose	1930
Aitchison, Mrs B. H.; 15 Frogstone Road West, Edinburgh, 10	1919
Aitchison, Henry A.; Lochton, Coldstream	1946
Aitchison, Sir Walter de Lancey, Bart., M.A., F.S.A.; Coupland Castle, Wooler	1933
Aitchison, S. C. de L.; Coupland Castle, Wooler	1943
Aitchison, Miss Shena D.; do. do.	1946
Aiton, Mrs Scott; Legerwood, Earlston	1936
Allan, John, M.A., F.S.A.; British Museum, London, W.C.1 .	1920
*Allhusen, S. D.; The Wynding, Beadnell, Chathill, Northumber- land	1934
Allhusen, Mrs K. R.; The Wynding, Beadnell, Chathill, Northum- berland	1923
Angus, T. C.; Rosybank, Coldstream	1933
Angus, W.; 69 Cluny Gardens, Edinburgh, 10	1910
Baillie, John; 13 Langton Gate, Duns	1925
Baker, Walter B.; 4 Devon Terrace, Berwick-upon-Tweed .	1946
Barbour, Archibald; Mansefield, Duns	1946
Barstow, Mrs Nancy; Wedderburn Castle, Duns	1947
Bell, Mrs Mary; Highcliff, Berwick-upon-Tweed	1946
Bell, Robert B.; Northfield, St Abbs	1923
Bell, Mrs M. L.; do. do.	1922
Bell, Rev. Wm. N., M.A.; 37 Oakfield Avenue, Glasgow, W. 2 .	1914
Biddulph, Lady; The Pavilion, Melrose	1926
Bishop, Mrs John; 1 Summerhill Terrace, Berwick-upon-Tweed	1925
*Blair, C. H. Hunter, M.A., D.Litt., F.S.A.; 57 Highbury, Newcastle-upon-Tyne	1918

LIST OF MEMBERS

	Date of Admission.
Bolam, A. C.; 58 Ravensdowne, Berwick-upon-Tweed . . .	1934
Bolam, Miss E. S.; Crossgill, Alston, Cumberland . . .	1935
Boyd, Rev. Halbert J.; Yarrowlea, Selkirk . . .	1935
Boyd, Commander John G.; Whiterigg, St Boswells . . .	1938
Boyd, Miss Jessie B.; Faldonside, Melrose . . .	1905
Brackenbury, Charles H.; Tweedhill, Berwick-upon-Tweed . .	1947
Briggs, Miss Margaret; Thornington, Mindrum . . .	1936
Brown, Mrs Ella C.; West Learmouth, Cornhill-on-Tweed . .	1947
Buist, A. A.; Kirkbank, Kelso, Roxburghshire . . .	1937
Buist, Mrs M. E.; do. do. . .	1937
Cairns, Mrs J.; Tweedholme, 24 The Drive, Gosforth, Newcastle	1937
Calder, A. J. E.; Bogend, Duns . . .	1948
Calder, Mrs Dorothy F.; New Heaton, Cornhill-on-Tweed . .	1946
Calder, Mrs Harriet G.; Billiemains, Duns . . .	1946
Calder, Mrs Mary A. H.; Marden, Duns . . .	1923
Callen, Rev. Richard, M.A., LL.B.; The Manse, Westruther, by Gordon, Berwickshire . . .	1935
Cameron, Miss Elizabeth W.; Trinity, Duns . . .	1912
Campbell, John M.; Primrose Hill, Duns . . .	1948
Carr, Miss Mona; 7 Lovaine Terrace, Berwick-upon-Tweed . .	1946
Carr, Robert; 30 Alleyn Park, West Dulwich, London, S.E. 21 .	1890
Caverhill, Miss H. F. M.; 2 Ravensdowne, Berwick-upon-Tweed	1923
Chartres, Mrs Mary; Mindrum, Northumberland . . .	1930
Clark, Wm. Donald; West Ord, Berwick-upon-Tweed . . .	1926
Clay, Miss B. A. Thomson; 18 South Learmonth Gardens, Edinburgh, 4 . . .	1939
Clennell, Miss Amy Fenwicke; Dunstan House, Alnwick . .	1925
Clennell, Miss C. M. Fenwicke; Glanton, Northumberland . .	1925
Cockburn, J. W.; Whiteburn, Grantshouse . . .	1925
Collingwood, John C.; Cornhill House, Cornhill-on-Tweed . .	1902
Cowan, Mrs Allister; Eastfield, Bowden, St Boswells . . .	1929
Cowan, Henry Hargrave; The Roan, Lauder . . .	1931
Craw, H. A.; 30 Cranley Gardens, London, S.W. 7 . . .	1933
Cresswell, H. G. Baker; Preston Tower, Chathill, Northumberland	1938
Cresswell, Mrs; Hauxley Hall, Amble, Northumberland . .	1923
Croal, Mrs J. B.; Raecleuchhead, Duns . . .	1928
Curle, F. R. N.; Greenyards, Melrose . . .	1904
Dalziel, Mrs E. W. T.; Nether Hallrule, Hawick . . .	1947
Danford, Miss A. B.; Hawthornden, St Boswells . . .	1931
Darling, Adam D.; The Friars, Bamburgh . . .	1923
Darling, R. Stormonth-, W.S.; Rosebank, Kelso . . .	1936
Davidson, George E.; Godscroft, Duns . . .	1946
Davidson, Mrs K.; Beal House, Beal, Northumberland . . .	1948
Davidson, Mrs M.; Kildonan, Yetholm, Kelso . . .	1929

LIST OF MEMBERS

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	Date of Admission.
Dewar, Dr Robert H.; 14 Silver Street, Berwick-upon-Tweed .	1948
Dickson, Miss A.; Woodhouse, Dunscore, Dumfriesshire .	1938
Dickson, A. H. D., C.A.; 15 Woodlands Terrace, Glasgow .	1925
Dickson, Miss Marjorie B.; 7 Doune Terrace, Edinburgh, 3 .	1929
Dixon-Johnson, Cuthbert J.; Middle Ord, Berwick-upon-Tweed.	1946
Dodds, Ralph Herbert, M.C., F.G.I.; Avenue House, Berwick-upon-Tweed	1903
Douglas, Rev. J. L.; Manse of Eccles, Kelso	1928
Douglas, Mrs W. S.; Mainhouse, Kelso	1925
Duggan, Rev. Robert; Christ Church Rectory, Duns	1947
Dunlop, Mrs Clementina; Whitmuir, Selkirk	1933
Easton, Wm. R.; Summerside, Jedburgh	1923
Elliot, Wm. Marshall; Birgham, Coldstream	1909
Elliot, Miss G. A.; do. do.	1936
Elliot, W. R.; do. do.	1936
Elliot, Mrs Walter; Harwood, Hawick	1939
Fairfax, Miss F. Ramsay; c/o J. Cook, Esq., W.S., 61 N. Castle Street, Edinburgh, 2	1931
Falconer, Mrs Agnes W.; Auchencrow Mains, Reston	1925
Ferguson, Miss J. J.; Ellem Cottage, Duns	1937
Fleming, Mrs; Scots Gate, Berwick-upon-Tweed	1926
Fleming, George J.; 41 East High Street, Lauder	1946
Fleming, Miss H. B.; do. do.	1947
Forster, C. P., M.A.; 1 Quay Walls, Berwick-upon-Tweed	1934
Furness, Sir Christopher, Bart.; Netherbyres, Aytoun, Berwickshire	1932
Glahome, Mrs Jean A.; St Mary's Place, Berwick-upon-Tweed .	1938
Gooderham, Canon H. B.; The Rectory, North Berwick	1934
Grant, James G.; Hermitage, Kelso	1939
Gray, Miss M.; 7 Marygate, Berwick-upon-Tweed	1945
Grieve, Miss Jessie C.; Anchorage, Lauder	1924
Gunn, Rev. Peter B.; The Manse, Roxburgh	1923
Haddington, The Rt. Hon. The Earl of; Mellerstain, Gordon . .	1947
Haggerston, Sir Carnaby de Marie, Bart.; Ellingham Hall, Chathill, Northumberland	1937
Hair, Dr Ralph R.; Vinegarth, Chirnside	1947
Hardy, Mrs Emily W.; 11 Bailiffgate, Alnwick.	1939
Harrison, Mrs B.; Levenlea, Selkirk	1937
Hastie, Alex.; Ravelston, Chirnside	1937
Hayward, Miss Ida M., F.L.S.; 7 Abbotsford Road, Galashiels .	1924
Henderson, J. D.; Chester Dene, Belford, Northumberland . .	1937
Henderson, T. S.; Colville House, Kelso	1936

	Date of Admission.
Herbert, H. B., M.A.; The Cottage, Fallodon, Christon Bank, Alnwick	1921
Herriot, Miss Jean M.; West Croft, East Ord, Berwick-upon- Tweed	1926
Herriot, David R.; West Croft, East Ord, Berwick-upon-Tweed	1948
Hicks, Rev. William Barry, M.C.; The Vicarage, Berwick-upon- Tweed	1946
Hogarth, Mrs Betty V.; 31 North Terrace, Berwick-upon-Tweed	1946
Hogarth, George Burn; Foulden Hill, Berwick-upon-Tweed	1931
Hogarth, George Gilroy; Commercial Bank, Ayton	1922
Holderness-Roddam, Mrs Helen M. G.; Roddam Hall, Wooperton, Northumberland	1926
Home, The Rt. Hon. The Earl of; The Hirsell, Coldstream	1915
Home, Major Gordon; Langhaugh House, Galashiels	1946
Home, Miss H. M. Logan; Silverwells, Coldingham, Berwickshire	1927
*Home, Sir John Hepburn Milne; Irvine House, Canonbie, Dumfriesshire	1898
Home, Lady Milne; do. do. do.	1930
Home, Miss Sydney Milne; The Cottage, Paxton, Berwick-upon- Tweed	1924
Home, Lt.-Col. William M. Logan; Edrom House, Edrom	1936
Hood, James; Linhead, Cockburnspath	1932
Hood, T.; Townhead, Cockburnspath	1937
Hope, Miss Katherine M.; Cowdenknowes, Earlstoun	1946
Hope, Wm. Weston; Braehead, St Boswells	1931
Hope, Mrs M. D.; do. do.	1931
Horsburgh, Mrs E. M.; Hornburn, Ayton	1939
Howard, Mrs Mary L.; Greystone Cottage, Dunstan, Alnwick	1939
Hunt, Mrs E. A.; Greenwell, Chirnside	1946
Hutchison, Mrs Mary M.; The Chesters, Lauder	1947
Inglis, John; West Nisbet, Ancrum	1948
Inglis, Mrs C. J.; do. do.	1948
*James, Captain Sir F., Bart.; Beech Grove, Ascot, Berks	1901
Jardine, Mrs A. S. H.; Chesterknowes, by Selkirk	1933
Johnson, Miss E. G.; 7 Marygate, Berwick-upon-Tweed	1937
Johnson, Miss Eva E. R., M.A.; do. do.	1937
Johnson, John Bolam, C.A.; 13 York Place, Edinburgh	1918
Johnston, Robert G., O.B.E., Solicitor; Duns	1907
Joicey, The Hon. Lady; Old Richhurst, Dunsfold, Surrey	1939
Keenlyside, Ronald; 10 Bondgate Without, Alnwick	1933
Kelly, Henry; Bellshill, Belford, Northumberland	1937
Kelly, Mrs Maud; do. do.	1937
Kennaway, Robert Owen; The Lodge, Lauder	1946
Kippen, Mrs M. J.; 33 Castle Terrace, Berwick-upon-Tweed	1948
Knight, Mrs W. A. T.; 1 Wellington Terrace, Berwick-upon-Tweed	1947

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Lamb, Rev. George; Greenock	1939
Leadbetter, James G. G.; Spital Tower, Denholm	1931
Leadbetter, Miss M. B. G.; do. do.	1947
Leadbetter, Mrs E. M. G.; Knowesouth, Jedburgh	1932
Leadbetter, Miss S.; do. do.	1937
Leather, Miss R. M.; Moorswood Cottage, Herons Ghyll, Uckfield, Sussex	1920
Lee, Miss Margaret A.; The Scaurs, Jedburgh	1939
Leitch, J. S.; Longformacus, Duns	1948
Lennie, Thomas, M.A.; The Schoolhouse, Swinton, Duns	1946
Lindsay, Mrs; Arrabury, Ayton	1924
Lindsay, John Vassie; Cornhill Farm House, Cornhill-on-Tweed	1946
Little, Canon James Armstrong; The Vicarage, Norham, North- umberland	1946
Little, Miss Sarah; do. do.	1947
Little, Mrs Nora; Crotchet Knowe, Galashiels	1923
Loch, Mrs H. G. M.; House of Narrow Gates, St Boswells	1939
Longmuir, Rev. James Boyd; Manse of Swinton, Duns	1946
Low, Miss Elizabeth L.; Douglas Cottage, Melrose	1946
Low, Miss K. M.; Bridgelands, Selkirk	1935
Lyal, Mrs Clara; Southdean, Hawick	1925
Lyal, Mrs H. S.; Wedderlie, Gordon	1939
Lyal, Miss M. M.; 16 Spottiswoode Street, Edinburgh, 9	1935
Macalister, Mrs Isabel; St James Manse, Yetholm, Kelso	1931
Mackenzie, Mrs Helen B.; Tree Tops, Bowden, St Boswells	1939
M'Callum, Rev. Wm., M.A.; The Manse, Makerstoun, Kelso	1917
M'Creath, Rev. J. F., M.A.; The Manse, Mertoun, St Boswells	1923
M'Creath, Mrs; do. do.	1923
M'Creath, Mrs H. R.; Gainslaw House, Berwick-upon-Tweed	1928
M'Creath, Mrs W. R.; Cheviot House, Castle Terrace, Berwick- upon-Tweed	1938
M'Donald, Dr D. T.; South Bank, Belford, Northumberland	1937
M'Dougal, Capt. Arthur R.; Blythe, Lauder	1920
M'Dougal, Mrs H. Maud; do. do.	1939
*M'Ewen, Captain John Helias F.; Marchmont, Greenlaw	1931
M'Ewen, Miss C. M., Marchmont, Greenlaw	1946
M'Keachie, Rev. Alfred, M.A.; The Manse, Chirnside	1923
M'Whir, Mrs M. H.; 10 Merchiston Bank Gardens, Edinburgh, 10	1938
Maddan, James G.; Aldon House, West Malling, Kent	1922
Marshall, Wm. James; Northumberland Avenue, Berwick-upon- Tweed	1904
Martin, Charles Picton; Broomhouse, Duns	1925
Martin, Mrs; do. do.	1925
Martin, Colin D.; Friarshall, Gattonside, Melrose	1947
Martin, Mrs M.; do. do.	1929
Mather, Mrs J.; Cairnbank, Horncliffe, Berwick-upon-Tweed	1948

	Date of Admission.
Mather, Mrs J. C.; Westmains, Milne Graden, Coldstream	1947
Mauchlan, Mrs Eleanor M.; Homecroft, Horncliffe, Berwick-upon-Tweed	1928
Meikle, John; Langrigg, Whitsome, Chirnside	1925
Meston, George E.; Madrona, Dingleton, Melrose	1947
Middlemas, Robert; Bilton Hill, Alnmouth	1898
Middlemas, Mrs Catherine; do. do.	1928
Middlemas, R. J., M.A.; Prudhoe Croft, Alnwick	1928
Milburn, Sir Leonard J., Bart.; Guyzance, Acklington	1927
Milburn, E. Walter; Craigview, Stow	1948
Milligan, J. A.; Yetholm Mill, Kelso	1942
Mills, Fred; Mayfield, Haddington	1916
Mills, George H.; Greenriggs, Duns	1924
Mills, Mrs Isabella B. B.; do. do.	1946
Mitchell, Miss Alice; Chiefswood, Melrose	1933
Mitchell, Major C., C.B.E., D.S.O.; Pallinsburn, Cornhill-upon-Tweed	1938
Mitchell, Mrs C.; do. do.	1938
Molesworth, Col. F. C.; Culworth, Bideford, Devon	1938
Murdue, Alan J.; West Fleetham, Chathill	1947
Murray, Mrs Marian Steel; 8 Northumberland Avenue, Berwick-upon-Tweed	1946
Neilson, W. K.; Lintalee, Jedburgh	1933
Neilson, Mrs; do. do.	1933
Newbiggin, Miss A. J. W.; 5 Haldane Terrace, Newcastle-on-Tyne	1946
Newton, T. A.; High Street, Wooler	1948
Ogg, James E.; Cockburnspath	1921
Oliver, Mrs Katherine; Edgerston, Jedburgh	1924
Otto, Miss Jane Margaret; Grey Crook, St Boswells	1931
Pape, Victor; Grindon Corner, Norham-on-Tweed	1939
Pape, Miss D. C.; do. do.	1933
Parker, Frederick; "Cabra," 12 Castle Terrace, Berwick-upon-Tweed	1936
Parker, Henry; Grindonrigg Hall, Duddo, Berwick-upon-Tweed	1948
Pate, Mrs; Horseupcleugh, Longformacus	1928
Paterson, James; Castlegate, Berwick-upon-Tweed	1927
Patterson, Miss Marjorie E.; Prudhoe House, Alnwick	1946
Peake, Lt.-Col. Frederick Gerard; Hawkslee, St Boswells	1946
Peake, Mrs E. M.; do. do.	1946
Peters, H. R.; Alderton, Castle Terrace, Berwick-upon-Tweed	1938
Petrie, Charles Strachan, Solicitor; Duns	1920
*Pidcocke, Rev. M. M.; Hillcote, Town Yetholm, Kelso	1912
Playfair, Mrs M. J.; Liberty, Elie, Fife	1937

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Date of
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Pool, G. D.; Underwood, Beechfield Road, Gosforth, Newcastle-upon-Tyne	1936
Porteous, Andrew Mather; Easterhill, Coldstream	1923
Prentice, Mrs B. J.; Tweedsyde, Berwick-upon-Tweed	1937
Prentice, Mrs J.; Swinton Quarter, Duns	1948
Pringle, Rev. Andrew; The Manse, Ladykirk, Norham-on-Tweed	1946
Purves, Thomas; 18 Castle Terrace, Berwick-upon-Tweed	1923
Purves, Miss E. J.; do. do.	1948
Ramsay, Douglas Monro; Bowland, by Galashiels	1931
Ramsay, Miss E. Lucy; Stainrigg, Coldstream	1923
Richardson, Miss S. D., 1 Devon Terrace, Berwick-upon-Tweed	1948
Riddell, J. D.; Couthylaw, Jedburgh	1948
Riddell, Mrs Alice B.; Osborne House, Tweedmouth	1938
Ritch, D. T.; British Linen Bank, North Berwick	1936
Ritchie, Mrs Ishbel Juliet; The Holmes, St Boswells	1926
Ritchie, Rev. John, B.D.; The Manse, Gordon, Berwickshire	1916
Robertson, Miss A. H.; Cawderstones, Berwick-upon-Tweed	1948
Robertson, Miss Ethel G.; do. do.	1946
Robertson, Miss Janet E.; do. do.	1946
Robertson, F. W.; 36 Hallhead Road, Edinburgh, 9	1941
Robertson, Wm.; Stamford, Alnwick	1923
Robertson, J. W. Home; Paxton House, Berwick-upon-Tweed	1947
Robson-Scott, Miss Marjorie; Newton, Jedburgh	1918
Rodger, David; Muircleugh, Lauder	1920
Rodger, Miss Jane B.; Ferniehurst, Melrose	1939
Runciman, Miss E.; Craigsford, Earlston	1937
Runciman, Viscountess; Doxford, Chathill, Northumberland	1934
Rutherford, W.; Boleside House, Galashiels	1933
Sanderson, C. W.; Birnieknowes, Cockburnspath	1937
Sanderson, Mrs F. B.; Wayside, Ayton	1925
Sanderson, J. Martin; Linthill, Melrose	1929
Sanderson, Mrs; do. do.	1929
Sanderson, Mrs M. C. D.; Northfield, Lowick, Berwick-upon-Tweed	1935
Scott, Miss A.; Spylaw, Kelso	1932
Scott, Mrs Helen J.; Westfield, Coldstream	1947
Sharp, James; Heriot Mill, Heriot, Midlothian	1923
Sharpe, Mrs Gladys R.; The Park, Earlston	1946
Shelford, Mrs E.; The Elms, 4 West Acres, Alnwick	1930
Short, David C.; Humbleton, Wooler	1946
Short, Mrs Eva D.; Old Graden, Kelso	1927
Sidey, Mrs A. R.; 14 Ravensdowne, Berwick-upon-Tweed	1931
Simpson, Mrs Dorothy; 9 Doune Terrace, Edinburgh, 3	1922
Simpson, J. P.; Beehcourt, Collington Rise, Bexhill-on-Sea	1932
Sinclair, T. D., B.Sc.; Schoolhouse, Westruther, Gordon	1948

	Date of Admission.
Smail, James I. M.; "The Advertiser" Office, Berwick-upon-Tweed	1948
Smith, J. E. T.; 20 Castle Terrace, Berwick-upon-Tweed	1925
Smith, Mrs D. G. Wilson; Cumledge, Duns	1947
Spark, William; Ellangowan, Melrose	1923
Spark, Mrs Lilius C.; do. do.	1925
Spiers, Henry, M.D., F.R.C.S.Ed.; St Dunstan's, Melrose	1925
Sprot, Mrs M.; Riddell, Lilliesleaf, Melrose	1933
Sprunt, Mrs B. R.; 52 Ravensdowne, Berwick-upon-Tweed	1937
Stewart, James; East Flodden, Wooler	1948
Stephens, Mrs I. W.; Yeavering House, Coldstream	1948
Steven, Alex. Cockburn Allison; "St Duthus," Berwick-upon-Tweed	1924
Stewart, Mrs J. B.; Faughhill, St Boswells	1934
Stodart, Charles; Leaston, Humbie, East Lothian	1916
Stoddart, Miss A. Y.; Kirklands, Melrose	1933
Straker-Smith, Thomas Dalrymple; Carham Hall, Cornhill-on-Tweed	1946
Swan, Mrs A. G.; Rhuallan, Chirnside	1937
Swan, David Keir; Harelaw, Chirnside	1946
Swan, Mrs D. K.; do. do.	1946
Swinton, Rev. Alan Edulf, M.A.; Swinton House, Duns	1915
Swinton, Mrs Alan E.; do. do.	1923
Swinton, Brigadier Alan H. C.; Kimmerghame, Duns	1938
Tait, T. M'Gregor; 45 Woolmarket, Berwick-upon-Tweed	1923
Tancred, Mrs D. H. E.; Old Free Manse, Crailing, Jedburgh	1938
Tankerville, Lady; Chillingham Castle, Wooler	1939
Thomas, Rev. A. F. W.; Ford Rectory, Berwick-upon-Tweed	1948
Thomson, Mrs A. D.; Nenthorn, Kelso	1928
Thomson, James Allan, F.F.A.; The Hill House, Coldingham	1946
Thomson, Mrs E. M.; do. do.	1948
Thomson, Mrs Moffat; Lambden, Greenlaw	1934
Thomson, Miss Nora W.; Hazlemere, Kingsdown, nr. Deal, Kent	1937
Thorp, Collingwood F., B.A.; Narrowgate House, Alnwick	1923
Threipland, P. W. Murray; Dryburgh Abbey, St Boswells	1924
Threipland, Mrs Eleanor Murray; do. do.	1929
Trevelyan, Mrs M. E.; The Old Manse, Yetholm, Kelso	1937
Turner, Mrs Grey; Hunterscombe Manor, near Taplow, Bucks	1933
Tweedie, James; 8 Suffolk Road, Edinburgh, 9	1920
Vallance, George; Cumledge Mills, Duns	1934
Waddell, Mrs Evelyn; Palace, Jedburgh	1931
Walker, Maxwell; Springwells, Greenlaw	1932

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	Date of Admission.
Walker, William; Marchlea House, Coldstream	1946
Walker, Wm. Buchanan Cowan; do. do.	1946
Watherston, Mrs R. H.; Menslaws, Jedburgh	1939
Watson, Miss M.; Westfield, Yetholm, Kelso	1932
Watson, George, M.A., F.S.A.Scot.; 8 Salisbury Crescent, Sum- mertown, Oxford	1947
Webb, Charles; Longhorsley Tower, Longhorsley, Morpeth	1928
Whinham, John; 3 Grosvenor Terrace, Alnwick	1913
Wight, Miss E. M.; Ecclaw, Cockburnspath	1931
Willits, Mrs H. M.; 13 North Terrace, Berwick-upon-Tweed	1939
Wilson, W. A.; Sandy Lodge, Friar's Cliff, near Christchurch, Hants	1922
Wilson, Maj.-Gen. Sir Gordon; Meadow House Mains, Hutton, Berwick-upon-Tweed	1947
Wood, Frank W.; Dochfour, Strathyre, Perthshire	1924
Wright, Mrs Margaret S.; St Leonards, Berwick-upon-Tweed	1947

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Taylor, George; Elder Bank, Cockburnspath	1920

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21 MAR 1952

PRINTED IN GREAT BRITAIN BY
NEILL AND CO. LTD.,
EDINBURGH.



HISTORY
OF THE
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BERWICKSHIRE
NATURALISTS' CLUB

INSTITUTED SEPTEMBER 22, 1831

"MARE ET TELLUS, ET, QUOD TEGIT OMNIA, CÆLUM"

VOL. XXXI. PART III.

1949

Price to Members (extra copies) 7s. 6d.

Price to Non-Members 10s.

EDINBURGH

PRINTED FOR THE CLUB

BY NEILL AND CO. LTD., 212 CAUSEWAYSIDE

1950

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PROCEEDINGS
OF THE
BERWICKSHIRE NATURALISTS' CLUB

MEASUREMENTS.

*Address delivered to the Berwickshire Naturalists' Club
at Berwick, 5th October 1949, by F. R. N. CURLE,
W.S.*

It is the duty, and should, I suppose, also be the pleasure, of the President of the Club at the end of his term of office to give an address on one or other of the subjects about which the Club is specially interested. In past years we have been very fortunate on many occasions in getting Presidents to talk about subjects in which they were really specialists. I must confess, with some shame, that I have no *special* knowledge of any of such subjects. I am mildly interested in them all, and I have had in consequence considerable searchings of heart. What on earth was I to talk about? However, I had a minor brain-wave. All science, all crafts and manufactures, and much of art and sport, depend to a very large extent on measurements, and accordingly I am taking "Measurements" as the subject of my address.

It is a vast subject, the measurement of length alone
VOL. XXXI, PART III.

varying from the distance of a remote star to the diameter of an atom, that minute particle which has, unfortunately, now acquired such a notorious prominence. But length, even if you add area and cubic capacity, is only one branch of measurement. There are many others, such as pressure, weight, speed, time, temperature, hardness, and various others. Poets and song-writers have even attempted to measure love—"as deep as the ocean, as high as the sky"—though the data available in this case are scarcely sufficiently accurate to warrant further consideration!

In the measurement of length it is necessary to have a unit. The mile is a suitable unit for the planet on which we live, even a complete circumference of which is less than 25,000 miles, a figure which the human brain can quite understand. Most of us, no doubt, in our earlier years, have contemplated how pleasant it would be to be the possessor of £1,000,000, and we have probably a fairly accurate picture of what £1,000,000 means. I am talking, of course, of the pre-Crippsian period, when £1,000,000 was something really worth having. Now I feel it must be more a source of irritation than of gratification. But when you begin to add a few nothings at the end of a million they cease to have any meaning for the ordinary human brain, and when we are dealing with astronomical measurements a different unit has to be taken, and the unit adopted by astronomers is a Light Year—that is, the distance travelled by a ray of light in a year. As light travels about six million million miles a year, or ten million miles per second, a Light Year is quite a substantial distance. The nearest star to us is $4\frac{1}{4}$ Light Years away, or 25 million million miles. With our unaided eye we can see stars about three thousand Light Years away, but the number of stars that we see is only about one in forty million that can be counted by the most powerful telescope. Nebulæ which can be photographed in a

100-inch telescope are so distant that their light takes 140 million years to reach us. When you consider that this planet on which we live is one of the very small planets in a minor solar system in this vast universe, I am sure that, like myself, you are all feeling by this time that we are not so very important after all. To quote Sir James Jeans: "In our universe the sun is as a grain of sand and our earth a millionth part of a grain, and we cannot flatter ourselves that our mundane affairs play any large part in it." This quotation I have no doubt will leave us all in a properly humble frame of mind. It is a fortunate thing for us that we live on one of the smaller planets. If we lived on one of the larger ones we could only, I suppose, crawl about like slugs, as the gravity would be so much greater that we could not possibly remain upright or keep our bodies off the ground. Our hands would have to support us and would not have been available for the wonderful work they have done.

At the other end of the scale from the astronomical figures which I have given you are the microscopic measurements which are nowadays carried out by physicists by means of the electron microscope, about which I am quite incapable of enlightening you. I think, however, we must all feel a profound admiration for the brains that have given us the information we now possess.

Other awe-inspiring figures, in this case dealing with the measurement of time, are supplied to us by geologists and physicists from their study of the rocks, and they agree that certain rocks in Eastern Canada must have solidified about 1230 million years ago. The process of cooling must have taken many millions of years, and it hardly seems possible that the earth can be less than 1500 million years old; it is believed that its age lies somewhere between 1500 million and 3400 million years. Perhaps it does not matter very much to us which!

Life of the lowest order only appeared about 1000 million years ago; fishes about 400 million years ago; reptiles about 200 million years ago; birds and mammals comparatively recently; and man, or a creature of somewhat similar shape, about a million years ago. When man acquired his capacity for speech and a brain is not known, but his progress for good and for evil has probably increased more in the last forty or fifty years than in the whole of the previous existence of the human race. These amazing figures which I have given you have been taken from the book *Through Space and Time*, by Sir James Jeans, which is extremely readable.

Leaving with some relief these vast, or minute, figures, which, after all, do not perhaps enter very much into our daily life, we might turn to more understandable measurements. There is, of course, a school of thought that is strongly in favour of the metric system. This has undoubtedly many advantages, but the advocates of that system should bear one or two things in mind. First of all, a yard is a reasonable human measure for rough use. Most of us when formally pacing out a distance would pace about a yard. A metre would be too big a pace for the average man to take. The foot is a very natural division of the yard, as it roughly corresponds to the size of the human foot. How the inch is arrived at I do not know. I am told, however, it is an old Masonic measurement used internationally from the date of the Great Pyramid. The rod, pole or perch is the breadth of a headrig when ploughing with a pair of horses. The metre is supposed to be based on the diameter of the earth, but I understand that the calculations were subsequently found to be erroneous, and the metre is consequently rather a bogus measure. There is this other advantage in our own measurements, that twelve, such as 12 inches in a foot or 12 pence in a shilling, can be divided by six, four, three or two. Ten can only be divided by five and two.

When we come to the measurement of area we are very much indebted to the Ordnance Survey, whose work must fill everyone with admiration, and whose plans are of the greatest assistance to anyone who has to deal with land. There are, however, one or two points that have to be noted as regards the Ordnance Survey. The survey is taken as if from a bird's-eye view, and as if the land surveyed was at sea-level. A 10-acre field at an elevation of 1000 feet above sea-level would exceed the Ordnance Survey figures by about 1 foot in ten thousand—that is, about 5 square metres. Furthermore, if an Ordnance Survey sheet is being used for practical purposes, such as measuring the line of a fence, it has to be borne in mind that the measurement is only approximately correct when the ground on which the fence is placed is approximately level; otherwise the length of the fence is bound to exceed the distance on the map by an amount depending on the steepness of the land.

Meters of course come into our daily life in the form of electric and gas meters, and also in certain instances of water meters, which ingenious appliances measure, we hope accurately, our consumption of these respective commodities. The gas meter, at any rate, is really an engine actuated by the gas passing through it, so that in the event of any defect it is probably under rather than over measure. I don't know whether the electric meter has the same pleasing habit or not!

The footrule and the measuring tape are the implements of man and woman respectively, the one being most concerned with 'wood, the other with material, for which these measures are respectively suited. The ordinary footrule is marked off in $1/16$ ths of an inch. A steel rule as used by engineers is divided into $1/64$ ths, and this is the smallest division that can be easily read by the unaided eye. Calipers are used with these where great accuracy is not needed. Much finer measurements are,

however, necessary in engineering work, and for these the micrometer is used. This instrument, which is usually known as a "mike" in the profession, depends on a very accurately made screw of 40 threads to the inch, which is in turn actuated by a collar divided into 25 divisions, each movement of one division of the collar accordingly representing $1/1000$ th part of an inch between the jaws of the "mike." And, of course, there are instruments on the same principle for taking internal measurements. $1/1000$ th of an inch is a very small measurement, but it is quite a definite amount. A human hair measures about $3/1000$ ths of an inch. An experienced trout-fisher could probably tell 3X from 4X gut, the difference between the two being just $1/1000$ th of an inch. The bore and stroke of car engines are always measured in millimetres, a relic of the time when cars were mostly made in France. Most of our cars have probably had to have their cylinders reground to compensate for the wear of years of use. With modern equipment it is quite simple to measure the amount of the wear and to know how many "thous" have to be cut or ground off to get the bore of the cylinder circular and parallel. Guess-work is quite out of date. Modern methods of mass production, as in the motor industry, necessitate the use of accurate gauges. Parts must fit without hand-work, and the fit required may be a driving fit or a running fit, but in any case the limit of error is probably considerably less than a "thou." Test gauges for reference are, I believe, made to much finer limits than that, and much use is made of double-ended gauges, one end of which must go and the other must not, whether measuring internally or externally.

An invention which has been of great benefit to the world is the ball-bearing and its cousin the roller-bearing. Without it that useful slave, the bicycle, would have been quite unworkable, there being twelve such bearings in each bicycle. Ball-bearings and roller-bearings are

used extensively in motor cars, aeroplanes, electric motors and dynamos, roller-skates, even fishing reels, and wherever power is conveyed by shafting, and these bearings have caused a very great reduction in wear and tear and friction, and consequently in waste of power. The manufacture of these bearings is a highly specialised industry, and is, I believe, carried out to a higher degree of accuracy than any other engineering operation. For standard bearings the balls only vary by $\frac{4}{1000}$ th parts of $\frac{1}{10000}$ th of an inch; for aeroplane work by $\frac{2}{1000}$ ths of $\frac{1}{10000}$ th; and in some specialised jobs, by $\frac{1}{1000}$ th of $\frac{1}{10000}$ th; or, in terms of our human hair, about $\frac{3}{1000}$ th parts. For the information about ball- and roller-bearings I am indebted to the well-known firm of Ransome & Marles Bearing Co. Ltd.

In ordinary engineering work the basis of accuracy is the surface plate. This is an iron casting, preferably supported on three feet to avoid any distortion, and which is carefully scraped to be a true surface. The correct way to originate a surface plate is to have three of them cast at the same time and test one with the other in the process of manufacture. After the plates have been machined as truly as possible, they are rubbed together with a thin film of red lead in oil or similar colouring, and the high spots in each are shown up. These are removed with a scraper which will take off a very fine shaving of metal. The reason why the plates have to be made in threes is that with two they might coincide, though one was slightly convex and the other slightly concave. In high-class work all flat bearings are scraped to a surface plate.

A very convenient tool is known as a feeler gauge. In the form of a pocket knife it has a number of blades, the finest being usually $\frac{2}{10000}$ th parts of an inch. Each blade is marked in so many $\frac{1}{10000}$ ths of an inch. Any two or more blades can, of course, be used together to measure the distances between two surfaces.

The measurement of temperature is done in many ways. The usual thermometer is a household fitting. An interesting form is the clinical one used by doctors. This has only to record over a small scale, but it has to retain its record for the doctor to read. Accordingly the mercury rises in a very fine tube and is retained there by, I suppose, capillary action, until it is shaken down again. Modern steel manufacture demands careful heat regulation. The temperature of a furnace is far above what a thermometer would stand, and a pyrometer is used, the basis of this being a strip of two metals with different rates of expansion under heat. The strip curves as it gets hotter, and moves an indicator. An interesting way of measuring heat is used by blacksmiths when tempering steel tools. The tool is heated to redness, the end then plunged into water or oil, which hardens it, but it is now too brittle and for most purposes has to be tempered. Part of the end is rubbed on a stone to clean it, and the heat travelling back from the uncooled end colours the steel—a light straw colour for most purposes, or darker for such as springs. When the desired colour appears, the whole tool is plunged into the water. This interesting and peculiar property of steel has been of the greatest importance, and to it man largely owes his mastery over metals.

The measurements of pressure enter into our daily lives. Probably the first thing most of you did this morning was to look at the barometer, which is an instrument for weighing the pressure of the atmosphere. We have been taught to consider that when the atmosphere is heavy the weather will be fine, when it is light the weather will be wet. This does not always follow. Last New Year, for instance, the barometer fell to an extent almost unprecedented and yet the weather remained quite normal. Possibly the clerk of the weather decided not to interrupt the gaiety usual at that season! Barometers are of two classes, roughly speaking. There

is the barometer which is formed by a column of mercury in a vacuum tube, and the other form is a vacuum in a corrugated steel box which gets compressed when the pressure is high and expands when the pressure is reduced. It actuates a needle on a dial; this is called an aneroid barometer.

Another form of pressure which concerns us if we drive a car is the pressure of the air in our tyres, also the pressure on the oil circulation. A very handy instrument for checking the former is a presometer, which does not seem to be in very regular use. It is not perhaps very accurate, but four tyres can be tested in a minute or so without getting dirty hands, and it shows up at once any tyre with less pressure than the rest. Motor cars are, of course, a mass of measuring appliances. We measure the speed, the trip, the amount of oil and petrol, the rate of electric charging, and sometimes the temperature of the cooling water.

The measurement of weight is most important in our daily life, whether in the nursery, the kitchen, the grocer's shop, or, of course, in the scientific laboratory. Like other measurements it varies from the very large to the very small. One prominent firm, Messrs Avery, inform me that their manufactures extend from a chemical balance sensitive to 1/10th of a milligram up to a chain-testing machine with a capacity of 1250 tons, which latter was used to test the chains in the construction of the Sydney Bridge.

Perhaps the most interesting thing in connection with weight is the knowledge that the atmosphere in which we live and breathe has a weight equivalent to a column of mercury about 30 inches high, or a column of lead a few inches higher.

An interesting method of testing the hardness of steel used in engineering workshops is the Brinell test. In this case a hard steel ball is driven by a known weight into the metal, and the diameter of the depression shows

the hardness or otherwise of the steel. In the preparation of ball-bearings it is found that a soft ball will not take a high polish, and accordingly is at once spotted when the balls are being inspected.

We all own appliances for measuring time. Most of us carry watches. Every house has its clocks. These are all driven and regulated either by a spring and balance wheel, or by weights and a pendulum. The manufacture of watches and clocks has reached a very high standard. They are beautiful pieces of engineering.

A time measurer not perhaps much used now is the hour-glass, which is used in the kitchen, and anyone who has done a "cure" at Droitwich will know those used in the baths there, which are made of wood, as no metal would long stand the effect of the strong brine. Incidentally, the human body in the swimming bath there makes a pretty efficient salinometer, as the water is so dense that one can float with head and neck and part of the shoulders out of the water.

In the world of sport, measurements are of supreme importance, as records exist to be broken. The fisherman has to know the weight of his captures. The shooting man has to be able to estimate with some accuracy what is an effective killing range, the billiard player to measure the correct angle for his shot. All important races are, of course, checked very carefully with a stop-watch, and cameras are also now used for recording the finish of races, especially horse races. The latter show clearly small differences which it would be quite impossible for the judge to be sure of otherwise, though a recent case has shown that this method is not infallible, the wrong horse having been given as the winner of an important race after the photograph had been taken.

Measurement and comparison are inherent in the human race. The small boy will boast to his friends of the superior prowess of his father or big brother.

Measurement is, in fact, part of the normal healthy spirit of emulation which most human beings possess.

There is one thing, however, that is very difficult to measure, and that is the debt owed by a club such as this to its officials for the work which they carry out. During my term of office I have seen enough of what Mr Cowan, especially, does to realise how much the Club owes to him and to the others. I know that no sooner is one expedition over than Mr Cowan begins making preparations for the next one, and I am sure I am voicing the feelings of you all when I thank them most sincerely for what they do for us.

Reports of Meetings for the Year 1949.

1. THE first meeting of the year was held on Thursday, 19th May, in "Club Weather," when 78 members arrived in 25 cars and met the President at Byrecleuch. Some skill was necessary in driving owing to the damage caused by the 1948 "Deluge," while a few days of recent rain had left the road surface along the Dye Water in a very loose state, with part of the bank washed out.

After lunch had been taken near the shooting lodge (the use of which had been granted by His Grace the Duke of Roxburghe) Mr Curle was introduced as President, this being his first official appearance since his appointment.

The walk to the Mutiny Stones was more or less a walk across the heather. On arrival, a description of this ancient collection of massive stones was read by the Secretary. This, under title "A Mystery of the Lammermoors," was taken from a book by James Logan Mack, dedicated to the memory of Donald Mossman Scott, who had been associated with him in a detailed survey of the Border Line from 1920 to 1924.

Mr J. S. Leitch, Longformacus, then gave members an amusing account of a local version of the origin of the Mutiny Stones. According to it the Devil, in a flight over Scotland, had suffered a slight accident, whereby the bundle of stones which he was carrying in his mittens burst and the stones were spilt out. The Devil, however, when he saw what had happened remarked to himself that he was damned if he was going to pick them all up again!

It may be noted that when the Club met here in 1929 the late Mr J. Hewat Craw, in describing the Stones, said they were considered to be the most impressive of all the ancient monuments in Berwickshire, and that there was no doubt that they formed a long cairn or burial place of the Stone Age. The general appearance suggested an affinity with the horned cairns of the north of Scotland rather than with the segmented cairns of the south-west. It was interesting to note, Mr Craw added, that Berwickshire had one, and only one, example of quite a number of important types of monument: (a) The Mutiny

Stones—a long cairn of the Stone Age. (b) A stone circle of the Bronze Age—at Borrowstoun Rig, in Lauderdale. (c) A cup-marked stone—at Blackburn, Chirnside. (d) The Broch of Edinshall—a defensive construction of the Iron Age. (e) The Earth House—in the parish of Edrom. (f) A Lake-dwelling—at Whiteburn, near Spottiswoode. (g) Coming to later times, the Mote-hill—at Castle Law, Coldstream; the Abbey—at Dryburgh; and the Priory—at Coldingham.

(The Mutiny Stones and the Broch of Edinshall are the largest monuments of their kind in Scotland.)

Mr Craw drew attention to several sites of interest visible from the cairn: Greencleuch, the scene of a conventicle in 1686, and the site of Hundaxwood, the hunting lodge of George Home of Wedderburn, brother of David Home of Godscroft, the seventeenth-century historian.

Returning to the cars, 68 members drove back to Horseupcleuch Farm, where they were entertained by Mr and Mrs Pate to a sumptuous tea.

The last item of the day was a visit by most of the members to the Promontory Fort of Wrinklaw, Mr G. J. Fleming acting as guide.

This is situated at the base of the Wrinklaw, on a promontory formed between the Water of Dye and a small stream which flows down a glen on the north-east. It stands 900 feet above sea-level and is $1\frac{1}{2}$ miles from Longformacus.

The face of the bank overlooking the Dye to the southward is abruptly steep, with an elevation of about 150 feet, while on the north-east flank the glen of the burn also provides a strong natural defence.

Across the neck of the promontory facing the higher ground on the north-west there rises a rampart of a height of 4 to 5 feet pierced by an entrance near the centre, and to the south of that covered by a trench 10 to 12 feet deep. The latter beyond the termination of the rampart is continued down the bank at a little distance from the fort.

Some 86 feet south of the rampart occurs a second line of defence, a trench 36 feet wide, crest to crest, with a mound in rear of it 6 feet in height, which curves slightly towards the steep flanks at either end.

Within the fort are the remains of a number of rectangular

foundations in two contiguous rows, and of other buildings, all probably connected with some late secondary occupation.

Little animal life was observed during the walk across the moor. A female specimen of the Emperor Moth (*Saturnia pavonia*) was caught, while several males of the same species were observed in flight. Fortunately no adders were encountered, though Mr Pate mentioned that he had seen seven this year, of which he had killed five. A baby lizard was also noted.

The following new members were admitted: Mr T. H. Bryce, Gordon; Brigadier W. St John Carpendale, Darnick; General Sir A. F. P. Christison, Bt., Melrose; Mrs L. C. B. Fasson, Jedburgh; Mrs N. Gillon, Abbey St Bathans; Mr J. C. Hall, Galashiels; Mrs C. B. Hamilton, Melrose; Mrs M. Horn, Melrose; Mr W. B. R. Laidlaw, D.Sc., Ayton; and Mrs J. I. Menzies, St Boswells.

2. The second meeting was held at the Farne Islands, in the type of weather to which one is becoming accustomed. Ninety-three members and friends met the President at Seahouses Harbour on Wednesday, 15th June. While overhead the weather was all that could be desired, it was a disappointment to hear from the chief boatman that the boats could not go out owing to a very heavy swell, and that even if they went out no landing could be made on the islands. There was some possibility that the swell would moderate by the time of the afternoon tide, but this was doubtful. Meantime members went across to Bamburgh Castle, where they were shown around by the custodian, and after lunch returned to Seahouses. Here they heard the welcome news that it would be possible to go out, but to land only on Inner Farne.

Eight boats, holding twelve passengers each, sailed round the islands, and members saw the countless birds perched on their precarious nests on the cliffs. During the voyage various types were observed in flight and fishing, including half a dozen solan geese and hundreds of guillemots. The Pinnacles at Staple Island were a wonderful sight from the sea. As one member remarked, they were like three huge pincushions plus pins. In the last boat to go out, members were fortunate in spotting a grey Atlantic seal bobbing up and down in the

water off a rocky islet near Inner Farne. It would be hopeless here to name all the kinds of birds seen, but amongst them were cormorants and shags, which resemble each other in general appearance but differ in size and detail; puffins, kittiwakes, razorbills, herring gulls, guillemots, arctic terns—hundreds of which were seen on their nests on the sand near the landing pier.

After landing on Inner Farne members assembled in St Cuthbert's Chapel, when the President thanked them for their attendance and in a few words introduced Mr J. M. Craster, who gave a most interesting talk on the bird population. Guillemots, he said, were rather peculiar in that they "fly under water" when getting their prey. And one must not omit the eider duck, of which many were sitting on their eggs, practically on the bare ground or on beds of nettle and sea-campion, and at first almost indistinguishable from their surroundings. Their protective colouring was in contrast to the magnificent black and white plumage of the drakes, several of which were seen in full "display."

Thanks to the special privileges given by the Farne Islands Association, there was no time limit to the stay on the Island. On their return to the mainland members joined the President for tea at the Dunes Hotel, Seahouses.

The following new members were admitted: Miss H. M. Bayley, Kelso; Mr R. Brooks, Kelso; Mr J. M. Craster, Alnwick; Mr J. L. Hume, Duns; Mrs D. M. H. Miller, Bamburgh, and Mrs H. S. Morton, Bamburgh.

3. The third meeting, on Wednesday, 13th July, opened in weather unlike our usual for the past three years, but welcome as a break in the drought. In spite of a disagreeable drizzle which at times turned to rain and at times cleared, some 86 members and friends met the President at the old Norman Kirk of Stobo, Peeblesshire. The Rev. Ian A. Auld, M.A., addressed the Club in his church and gave an interesting description of its history, which dates back to 1175. Thereafter, members examined the special points he had mentioned, both inside and out, including a set of "joughs" at the church door, for scolding wives; a St Andrew's Cross mosaic in the floor of the porch; a quaint tombstone

portraying a highland soldier of Prince Charlie's army; and a barrel-vaulted cell or chapel, associated traditionally with St Mungo (St Kentigern).

A visit was then made to the policies of Stobo Castle where, when the rain ceased, lunch was taken on the bank of the Water Gardens lake. In a walk round the Water Gardens, the fall of water over the natural cliff, the several stages of small lakes, the varied specimens of flowers and shrubs too numerous to name, and the quaint stone ornaments in unexpected places formed a unique setting.

Later followed a drive to Dawyck House, the residence of Lt.-Col. A. N. Balfour, who, unfortunately, was abroad. Col. Balfour's head forester conducted the party round part of the woods, and members viewed many magnificent trees, including some of the first larches planted in Scotland in 1725, a freak beech-poplar, a spruce, whose leaves when crushed smell like a tangerine, an Oregon spruce, a Caucasus spruce, and several Douglas firs planted in 1835 from seeds sent from the Pacific Coast by David Douglas, botanist. The old Dawyck Church, now a mausoleum, was also visited.

Returning to the cars, members drove back to Peebles where 74 sat down to tea with the President at the Tontine Hotel. (Only 40 of these teas had been previously booked.)

The Secretary handed round a rapier which had been brought to the meeting by Sir Carnaby de Marie Haggerston of Ellingham Hall. It had been found near the Hall by a couple of boys who fell over the point in a sandbank uncovered by the 1948 "Deluge." A local antiquarian gave its probable date as later eighteenth century and its origin as Spanish (a "Toledo Blade"). Despite its discovery in sand the blade itself was keen and rustless.

The following new members were admitted: Mr John Cairns, Berwick; Mrs and Miss R. Baker Cresswell, Newton-by-the-Sea; Mrs D. E. Henderson, Earlston; Mrs J. D. Martin, Berwick; Mrs M. G. Moffat, Spittal; and Mrs M. I. D. Wight, Grantshouse.

4. "Club Weather" was resumed at the fourth meeting on Thursday, 18th August, when the President met 85 members and friends in front of Ferniehirst Castle. Here Mr John

Renilson, F.S.A.Scot., gave a most illuminating account of the history of this ancient stronghold of the Ker family, which dates back to the fourteenth century. Before leaving, members inspected the banqueting hall, and it was remarked by several that the Youth Hostels movement was fortunate indeed in having such a place of residence.

Members then drove to Jedburgh, with a halt on the way at the Capon Tree. At least a thousand years old, it is almost the only survivor of the primeval Jed Forest. Next halt was at the Abbey, where the party was taken round by the Ministry of Works custodian. The Abbey, the best preserved of the Border Abbeys, is partly twelfth century and is dedicated to the Virgin Mary. The grounds surrounding it are kept in beautiful order.

After a visit to Queen Mary's House, whose grounds slope to the Jed Water, the meeting ended at the Royal Hotel, where 50 members joined the President at tea. (Here, again, not all these teas had been booked in advance.)

Two applications for membership were approved: Mr D. M. Smith, Chirnside, and Mr John Renilson, F.S.A.Scot.

An enquiry by a lady in London was announced by the Secretary, desiring information as to who were the "Exposers" at Monynut, Berwickshire, and what was their function when they presented a toddy ladle to Mr W. H. Ritchie in 1822. Later, the information sought for was received from a member, the late County Clerk of Berwickshire, and was duly passed on to the enquirer.

5. The fifth meeting was held on Thursday, 15th September, in Northumberland, when members assembled in Warkworth Market Square after, in some cases, a very early start. With the President they drove to Morwick Mill, where a site had been arranged in "Club Weather" for a picnic lunch on the banks of the River Coquet.

Recounting why this site was chosen, the Secretary told of the discovery of a new "incised rock" at Midstead, near Alnwick, and showed a photograph sent him by the finder, Mr Edward Miller. A short account was read of the incised rocks at Morwick, which were the main object of coming to this part of the river. Thereafter, members divided into

parties and in turn viewed the incisions, which had been first discovered in 1873 by Mr Middleton Dand, Hauxley Hall. They were joined here by Bishop Dickinson, Vicar of Warkworth, who helped to identify some of the markings. As the Secretary's antiquarian interest has been aroused, both at the meeting and earlier when he visited the place, it is possible that more of the earlier markings may be identified later.

Mr Davidson, the miller of Morwick, gave a demonstration of the working of the old mill which is now out of use, but, as there was no corn to grind, the operation was necessarily restricted, since the stones would have heated with nothing between them.

The only "fly in the ointment" was an expression of regret by the President that he had not been told of the fishing possibilities of the Coquet, since, in that case, he would have brought his trout rod!

Members then drove back to Warkworth and were met at the Castle by Dr C. H. Hunter Blair and Mr J. L. Honeyman, Newcastle. Starting outside the main entrance gateway, Dr Hunter Blair gave a short history of this venerable stronghold and continued his talk inside the Castle. Mr Honeyman then took up the tale, describing other portions, including the keep, where members inspected most of the apartments.

Returning to the town, they were addressed in the Church of St Lawrence by the Vicar. Beginning with a history of the Church, which dates back to 737, and was built by Ceowulf, the speaker told of the discovery of the foundations of a pre-Norman stone church which are hidden under the flagstones in front of the chancel. The long, narrow nave, 91 feet, is the longest in Northumberland. The address concluded with an account of the various operations which the Vicar had done recently and hopes to carry out later.

Dr Hunter Blair also spoke about the church, and described in detail the beautiful iron-work altar rails.

These graceful rails of scroll-work, in finely wrought iron, lay neglected for long beneath the tower of the church; some years ago they were restored to their proper place in the chancel. There is no record, at least after much searching none has been found, as to whence they came or when they were placed in Warkworth Church.

The armorial shield of White suggests a Stannington provenance through Blagdon Hall in that parish; it is only a wild surmise to conjecture that they may have come thence when that church was restored in mid-nineteenth century.

The two central panels contain shields surrounded by fine scroll-work: the dexter shield bears the charges of three cocks' heads rased, combed and wattled, surmounted by the crest of a cock—*ser gallus cantat*.

The sinister shield contains an interlaced monogram of the letters M.W., also with the cock crest.

The shield of arms is that of the family of White of Redheugh, Newcastle and Blagdon; the monogram is that of Matthew White.

The blason is *argent three cocks' heads rased sable combed and wattled gules* as blasoned for Matthew White in the Heralds' Visitation of Durham in 1575 and certified by him on 1st September of that year. No crest is there given.

Matthew White was the son of Matthew I by his wife, Jane Fenwick; he was Governor of the Merchants' Company of Newcastle-upon-Tyne 1712–39, Sheriff of Northumberland 1720, built Blagdon Hall and died there 18th June 1750.

The shield here blasoned forms quarters I and IV of the quartered shield on the pediment of the south front of Blagdon Hall.

John White, an ancestor of Matthew, living in 1462, was a co-heir of Hugh of Redheugh, whose arms either he or a later descendant adopted. These first appear, with the crest of a cock's head rased, upon the armorial seal of Sir Hugh del Redheugh attached to an Indenture of 31st May 1368 between Hunphrey Bohun, Earl of Hereford, Constable of England and Lord of Annandale, and Sir Hugh, whereby he is granted the custody of Lochmaben Castle and the Valley of Annan for two years at a fee of £200 a year.

Note.—The particulars of the altar rails and White family pedigree given above are taken from an article by Dr Hunter Blair published last year, of which a copy has been sent by him to the Vicar of Warkworth, and re-copied by the Secretary. The authorities quoted therein are (1) *Visit of Durham*, ed. Jos. Foster, p. 327; (2) *Hodgson's History of Northumberland*, II, ii, 326; (3) *Surtees' History of Durham*, II, ii, 132; (4) *Ca. Doc. Scot.*, IV, Nos. 144, 161.

Passing to the remarkable effigy at the west end of the church—of a de Morwick—Dr Hunter Blair pointed out in detail each item of his armour of plates and chain mail, which proved that he had lived in the fourteenth century. The fact that he lay with his feet crossed did not mean that he was a Crusader, as some people hold, but merely that it was the most comfortable position in which to take his long, last rest.

The meeting ended with tea at the Warkworth House Hotel, where 73 members and friends joined the President. The following three applications for membership were approved: Miss C. M. Gordon, Reston; Mr E. O. Hector; and Mrs K. M. Hector, Lauder.

6. The Annual Business Meeting was held in the King's Arms Hotel, Berwick, on Wednesday, 5th October, when 44 members were present. Apologies for absence were intimated from four members.

The President opened the meeting with regrets that the Right Hon. The Earl of Home had been unable to continue in office, and to be where he himself was now standing. The President then read his Presidential Address, entitled "Measurements," which, by its skilful presentation, brought a highly technical subject within the reach of all present.

Thereafter Mr Curle appointed Mr Robert Middlemas, Alnwick, as his successor, and nominated Rev. Halbert J. Boyd, Yarrowlea, as the new Vice-President. His term of office being now completed, he handed over the Club Flag to his successor.

Secretary's Report—1949.

An exceptionally fine season was enjoyed at the field meetings, at which there were very good attendances, the lowest being 73 and the highest 93.

Since the last General Meeting there had been comparatively few losses of members by death (11), and fewer resignations (in all 32) than had been feared on account of the raising of the subscription rate: to set against the latter there was quite a number of new members (34), including two re-entrants. The death in the week just past of the Rev. M. M. Piddocke,

a former President, was much regretted. The total Membership now stood at 336.

Following the remit to the Council, at the last General Meeting, as to the alteration or otherwise of the wording of Rule 10, the Council decided that the Rule should not be altered, since a situation such as had occurred in 1948 was unlikely to occur again.

Printed copies of various articles by Professor George Watson, M.A., F.S.A.Scot., Oxford, had been received; also an intimation from the *Scottish Historical Review* that any articles of historical interest appearing in the *History* would be reviewed.

References were made to the Golden Jubilee as a minister of the Church of Scotland celebrated by Rev. John Ritchie, Gordon; to the Father of the Club, Mr Robert Carr; to a rapier found by a member at Ellingham Hall, after the "Deluge" of 1948; to a query from a non-member asking what was the function of "Exposers" at a farm sale in Berwickshire in 1822; and to correspondence as a result of which there was exhibited "on the table" an illustrated edition of Vol. I, part I, of the *History*.

A letter was read which stated that there are less than ten members of the R.S.P.B. (Royal Society for Protection of Birds) in the whole of the Borders: and that of all the counties of Britain, the Borders have the worst representation of any.

Three exhibits were on view at the meeting: (a) A copy of the Club's Programme of the meeting in June 1869, handed in by Miss Boyd. This had been found among her father's papers when he was President of the Club. (b) A stone mould for making small ornaments, such as jewellery and buttons—date not earlier than the middle of seventeenth century—shown by Mr Cowan. (c) Four mounted specimens of the nest of the Common Wasp (*Vespa vulgaris*) shown by Mr Milburn. These display various early stages of construction right from the beginning.

Treasurers' Report—1949.

The Treasurers' Report (see *infra*, p. 263) was read by Mr Purves. Income received for the year ending 20th September

1949 amounted to £383, 15s. 3d., which, with the balance brought forward from 1948 of £105, 2s. 9d., made a total of £488, 18s.

Expenditure (including cost of printing *History* for 1947, £112, 0s. 9d.) amounted to £240, 12s. 7d., leaving a credit balance in General Account of £248, 5s. 5d. Against this sum there was the estimated liability for printing the 1948 *History* of £214, 11s.

Thereafter Mr Purves thanked the Hon. Auditor, Mr Walter Baker, for his kind assistance in auditing the Club's books and accounts.

A hearty vote of thanks was given by the meeting to the Secretary, the Treasurers and the Editing Secretary for all their work.

The office-bearers having retired from office, Mr Curle proposed, and Mr Hastie seconded, that they be re-appointed *en bloc*. This was approved.

The following new members were elected: Mrs H. M. Evans, Berwick; Mr N. Hogg, Wooler; and Captain George Tate, Warkworth (a re-entrant).

The re-appointment of Mrs Bishop, Berwick, as delegate to the British Association was approved.

After the Editing Secretary had referred to the current issue of the *History*, he asked whether the meeting was satisfied with it: and the members having expressed their content, Mr Buist asked whether the subscription should be maintained at 20s. A formal motion to this effect was moved by him, seconded by Mr Curle, and approved by the meeting.

Arising out of the Treasurers' Report, Mr Swinton proposed that the subscription be reduced to 15s. per member where there was more than one member in the family. After discussion, the matter was referred to the Council.

A compliment was paid by Mr Fleming to all who had had anything to do with the issue of the current *History*. He regarded it as a most creditable and valuable piece of work, and thought that a copy should be sent for review to periodicals like *Nature*. The only feature he took exception to was the meteorological records, which were always a year behind.

On a query as to what periodicals were exchanged with the Club, and as to whether Societies that do not show interest could not be deleted from the list, a formal proposal was made by Mr Dixon-Johnson, seconded, and approved by the meeting, that the Secretary write to the various Societies and enquire if they are really interested in receiving the *History*, so that, if not, they can be deleted from the list and allow the same number of copies to be available for other Societies.

Arising out of the Secretary's note on the R.S.P.B., Lt. Col. Logan Home made a statement on the preservation of birds, plants, etc. He referred to the vast damage done by the operations of bulldozers to the streams all over the Borders after the "Deluge." These had dredged up not only stones and gravel (which would simply be washed in again by succeeding spates) but also had utterly destroyed all plants which had formerly provided valuable food for birds and fish. Thus a vast amount of public money had been stupidly wasted, while what were formerly valuable rivers and streams had now become merely canals.

He gave an example from the south of England, where one day a squad of R.E.s arrived on a site and simply sheared off all the top surface of a considerable area where several rare birds were accustomed to breed.

Eventually Col. Logan Home agreed to arrange with members willing to join the R.S.P.B. and act as bird-watchers, since a strong Society's representations would have more effect than the protests of individuals. Finally he advocated that children should be induced to take an interest, so helping to preserve bird and plant life.

This being all the business, a vote of thanks was accorded to Mr Middlemas for presiding.

Two reels of ciné film were run through by the Secretary: one of the Club meetings, old and new, including that at the Farne Islands; the other of various "nature" shots, including (in colour) a double rainbow.

After a vote of thanks to the Secretary, the members dispersed for tea in the hotel.

The following report on "unusual" birds was read (see further Notes on p. 250):

- (1) *Pied Flycatcher*: There was an increase in numbers, as well as an extension of range, of this bird in Berwickshire: 14 pairs nested at The Hirsell, as against 5 pairs in 1948; while 2 pairs nested at Edrom, as against none for any previous year.
- (2) *Crossbill*: Two birds were seen near Coldingham; these were young birds, and it is possible that this bird may have nested in the vicinity.
- (3) *Snowy Owl*: One was seen on Coldingham Moor in January.
- (4) *Osprey*: An adult male was picked up in a weak condition near Coldingham on 19th May: it was sent to the Hancock Museum, where it lingered on for a week; an adult female was also picked up on 19th May, on the river Coquet: it died very soon afterwards.
- (5) *Bewick's Swan*: Recorded from Kimmer Lough, Northumberland, in the winter of 1948-49.
- (6) *Gadwall*: A pair were on Hule Moss on 6th March.
- (7) *Black-tailed Godwit*: One was seen on Hule Moss on 22nd May.

ADDITIONAL NOTES ON STOBO AND DAWYCK.

By H. H. COWAN.

STOBO has had eighteen different spellings, the earliest *Stoboc* in 1126, while the present has been in use since 1473. Variations like *Stobhowe* suggest it may mean "The Hollow of Stumps," as if from charred stumps after a forest fire, or from the practice of cultivators having to stub up the roots. Another derivation is the old schoolmaster's one of *sto* (Latin), I stand, and *beau* (French), beautiful.

Originally Stobo comprised the whole region from the Wells of Tweed down to its junction with Lyne Water. But the growth of the parochial system delimited one parish after another—Tweedsmuir, Drumelzier, Glenholm, Broughton, Dawyck and Lyne—leaving the mother parish within its present narrow boundaries. Not, however, so narrow as to justify the tourists' jibe: "There is room for nothing but the 3 R's—road, railway, and river." With its side valleys, uplands, forest and heather, its extent is 7 miles long by $5\frac{3}{4}$ wide, with an area of 10,309 acres. The hills around excel in the sonorous dignity of their names: Pyked Stane, Penvalla, Penvinney, Trahenna, Dromore. The manor of Stobo is said to have become the property of the Church in the time of St Mungo (St Kentigern), who died in 603.

The earliest human relics are five circular British forts. The Tweed, which flows past Stobo, may be small in volume here, but it has the same chorus as in other parts of its course. Salmon poaching at night with torches and the "Carlisle Fly" (a lump of lead bristling with hooks jerked into the fish while it lay fascinated by the lights) used to be so common that the proprietor, Sir Graham Graham-Montgomery, when asked if there were any poachers among the people on his estate, said: "They are all poachers, but two: the minister of the parish never poached, and I have given it up."

The Stobo Hedges were once famous as the name of a road, "execrated by every traveller, which ran for $1\frac{1}{2}$ miles through a mass of mortared earth and was confined between two hedges." During the absence of foresters in the First World War these hedges, unpruned of their young wood, burgeoned with memorable beauty of may-flower, briar rose and coral barberry. But this luxuriant overgrowth has had to be cut back to a bare three feet high, with a doubtful prospect of survival.

The Slate Quarry of Stobo was once reckoned "an inexhaustible fund of wealth to its proprietor." It was "inferior to no slate whatever." The best houses in Edinburgh were roofed with it, and the Town Council of Peebles supplied "sklaitts from Stobo" to the President of the Court of Session for the building of Craigmillar House.

But, as the only access to it was by a steep, narrow track, loads of only 2 cwt. at a time had to be brought down on pack-horses to carts in the valley. As a result, when the light Welsh slate came north by rail, the heavy Stobo slate went out of use, and the "inexhaustible fund" was exhausted. The Quarry is still worth a visit, to see sheer rugged cliffs and a vast accumulation of débris. It was here that the father of the Black Dwarf earned his meagre living.

The quarrymen's shelter is sometimes called "Cheat-the-Beggars," because, seen from the road, it looks like a mansion.

Altarstone, part of the Barony of Stobo, owes its name to a large stone near the farmhouse on the north side of, and close to, the road. Flat on the top, it is said to have been a Druidical altar; while marks on its upper surfaces corroborate the superstition that a witch, hunted in the shape of a hare, leapt from the brow of Scrape clean over the valley, and, alighting on the monolith, made with her claws—that kind of hare has claws—the dents which are still visible.

At *Dawyck Mill* there is an almost perfect specimen of the Cromlech (*crom*, curved; *leach*, stone), "a sepulchral construction of the Stone Age," called "Arthur's Oven." It consists of two upright stones and one flat stone laid across as a roof, but was broken in pieces to form a culvert for the stream.

Dawyck Estate is bounded on the north by the lands of Barns, on the east by Woodhouse, on the south by Drumelzier, and on the west by Stobo. The name is probably a corruption

of *Davach*, which in the old Celtic system of land measures signified an extent of ground—32 ox-gates or 416 acres.

Dawyck originally formed a chapelry of Stobo. The earliest reference to it is about 1214 when there was present at the adjustment of the Marches of Stobo "Mihhyn senescallus de *Dauwic*."

Note.—Much of the information contained above is derived from *A History of Peeblesshire* (J. W. Buchan and Rev. H. Paton), published in 1927 by Jackson, Wylie & Co., Publishers to the University of Glasgow, to which acknowledgment is made.

FERNIEHIRST CASTLE AND THE KERS.

By JOHN RENILSON, F.S.A.Scot.

“But the Kers were aye the deadliest foes
That e’er to Englishmen were known,
For they were all bred left-handed men
And fence against them there was none.”

The Raid of the Kers (James Hogg).

THE family name has been and is spelt in a variety of ways, as Karr, Karre, Ker, Kerr, Car, Carr, Carre, and it has been asserted that it is derived from the Celtic *Caer*, as, indeed, the name is usually pronounced in Scotland. The meaning is “strength” or “stronghold.” As Karre, the name figures in the Roll of Battle Abbey, and it would seem that one at least of the earlier representatives of the house accompanied William the Conqueror to England. After the Conquest the name disappears from history for more than two centuries, but some member of the family appears to have given his name to Kershall in Lancashire. At the beginning of the fourteenth century it reappears, this time in Scotland, where one branch established itself at Kersland, in the county of Ayr, in the persons of two brothers, Raph and John, followers of Earl Douglas, whose influence was at that time paramount in the Lowlands of Scotland.

Some have fancied that these two gentlemen were brothers of Carreshouse, in Normandy, which family came from there with King David when he returned out of banishment in France. Others allege them to be brothers of Carresland in the west of Scotland, and descendants of Maclartimore of Ireland, a very ancient and noble family. It is thought that these two families of the Kers in England and Ireland came out of Baron Carreshouse in Normandy: firstly, because of the greatness and antiquity of that family; and secondly, because their coats of arms do sympathise and are all one with his, which is upon a field gules, a chevron argent, charged with

three mullets of the first. About 1330 these two brothers, Raph and John Ker, came into Scotland in the days of Robert the Bruce, who gave to the elder brother, Raph, for special services, certain lands lying between the Water of Jed and Scresburgh, which then belonged to Simon Glendinning. These lands being erected in a barony, Raph called them after his name, "The Barony of Carrhuch or Carrhouseheugh," owing to the house being situated at the head of a heugh. This is the root of the family of Ferniehirst, the head of which is now the Marquis of Lothian. John Ker the younger, who has been described as of the Forest of Selkirk, obtained, about 1359, a grant of lands in Bowmont Water and became the ancestor of the Kers of Cessford, now represented by the Duke of Roxburghe. Neither of the brothers acknowledged the superiority of the other, and the two houses of Ferniehirst and Cessford, although making common cause against all enemies, whether English or Scottish, maintained a jealous rivalry between themselves, which was not eradicated by their intermarriage. It was claimed by Cessford that John his predecessor was the elder brother, and this caused a continual debate between the families. It is most probable that Raph was the elder, since he called his lands after his name and his descendants were honoured with the degree of knighthood and made Wardens of the Marches of Scotland, though the others were very brave men.

Whether they belonged to Ferniehirst or Cessford, the Kers possessed one very strong family characteristic: they were all, or practically all, left-handed, so much so that Ker-handed and left-handed became in Scotland synonymous. They thus acquired in common with many other Scottish families a sobriquet which sufficiently denoted their character. These additions to the family name, which were generally alliterative, were supposed to, and often did, denote some peculiarity or marked family failing or trait. Thus the Gordons were usually referred to as "gay," the Grahams as "gallant," the Mortons as "mad," the Pattersons as "pawky"; and so the Kers became known as "capit" throughout the length and breadth of the Lowlands. "Capit" means "capriciously irritable," and there would appear to be some grounds for thinking that this epithet was not unjustly bestowed.

The original fabric of the house of Ferniehirst was a castle of five towers mantled about with a strong wall or rampart. Four of these towers were destroyed by the French and this fact is recorded in the French history of their wars in Scotland. The etymology of the name "Ferniehirst" comes from the Saxon word "*herst*" (wood), and it being naturally grown over with ferns, is termed in Saxon "The Fern Wood." This sheltering wood, which in earlier times would extend farther to the north and east than it does to-day, was part of Jed Forest. The stronghold being built in this thick wood, although not on a commanding site, caused difficulties to an approaching enemy, and to the defenders the opportunity to ambuscade attacking forces. Its stirring story occupies a prominent place in the rise of the Lothian Kers and in the history of the Borders.

Thomas Ker of Carrehouseheuch, seventh in line from Raph Ker, married Catherin Colvill, daughter of Richard Colvill of Ochiltree, and got with her the Barony of Oxnam. He was a very active man and was Heritable Bailiff of the Abbey of Jedburgh and also of Jed Forest. In 1490 he changed his residence from Carrehouseheugh and built a house not far distant from his former abode, upon the same lands, in the midst of a forest on a "ferny hill," and called it "Ferniehirst," from which his successors received their designation. Thomas Ker died in 1499, and his eldest son and heir, Sir Andrew Ker, proved himself a man of remarkable talent, great tact, and unbounded courage, and was therefore a conspicuous figure in Border life. He was one of the Commissioners appointed to treat for peace with the English in 1528, for which he was rewarded with the Charter of the Barony of Oxnam and fresh Charters of Ferniehirst from James V. He also got the Bailliary of Jed Forest in 1542. He was the laird of Ferniehirst who fought Buccleuch at the battle of Melrose in 1526, when Sir Andrew Ker of Cessford was killed, and was one of the signatories to the pact or bond between the Scots and Kers in 1529.

The Border country had not always been in the savage and uncultivated state which existed at this period. In the twelfth century there was peace between England and Scotland and constant intercourse between the two countries. When David,

that "Sair Sanct for the Crown" as one of his successors called him, founded the four noble monasteries of Melrose, Dryburgh, Jedburgh, and Kelso, the choice of those spots may have been dictated partly by the policy of improving the agriculture of the most fertile portion of his kingdom, but also by the hope of protecting from spoliation the lands which were then put under the fostering care of the Church. It was not until Edward I of England formed the design of annexing the Kingdom of Scotland to his dominions that there grew up that continuous hostility between the two kingdoms which kept the borders on both sides in a state of alarm, and led to the frequent ravages and depredations which continued until the accession of James VI to the English throne brought both Kingdoms under one Crown. Even up to the end of the fourteenth century hostilities were conducted in a chivalrous manner, and there was not that bitter hatred between the two countries which afterwards existed. A century later this spirit of chivalry had expired; a generation had grown up which, inured to war from childhood, had seen its homes ravaged on many occasions. The borders of both countries had been converted into a wilderness and were only inhabited by soldiers and by robbers. The mode of warfare adopted by the Scots themselves, though necessary, was destructive to property and tended to retard civilisation. Avoiding pitched battles, they preferred a wasting and protracted war, and even destroyed the grain and other resources of their own country which would give assistance to the English. Meanwhile they secured their cattle in the glens, mountains or forests, and watched for an opportunity to attack the invaders with advantage, or even, while they were still in Scotland, to burst into England themselves in another direction and re-visit upon the English border the horrors perpetrated upon their own. The fortresses which they erected were not comparable either in strength or grandeur to those on the English side. Cessford and Branhholm, which may be taken as two of the strongest castles on the Scottish border, were far inferior to Alnwick, Raby and Naworth. Nor did the Scots hesitate to destroy their own castles if they thought they might afford a resting-place for an English garrison. While these castles were capable of resisting a sudden assault, they were not victualled or provided for a long siege, and it

was very rarely that a Border chieftain allowed himself to be immured by the enemy in his own stronghold. He held with the Douglas that "it was better to hear the lark sing than the mouse squeak."

On 22nd September 1523, an English army of 10,000 men, well equipped with artillery and under the command of the Earl of Surrey, marched across the Border, its objectives being the town of Jedburgh and the home of the Kers. In spite of a stout defence, Jedburgh with its Abbey was captured and destroyed by fire by Surrey's troops. The next day the English general sent Lord Dacre to capture a stronghold called Ferniehirst. This castle, as Surrey writes to his King, "stood marvelous strongly within a grete wood," and was garrisoned by a very small number of the Ker henchmen. Dacre, when he neared it, divided his officers and men and attacked at different points, at all which they met with stout resistance. At the same time they were cunningly attacked by men hidden in the surrounding trees. After long and trying skirmishing, the Scots fell back to the support of the castle, which, after a fierce onslaught, was captured by the English, and as reported by Surrey, he "threwe down the same." Thirty-two Scots were slain and forty wounded. In a letter from Surrey to his master, giving an account of this affair, he says; "I assure Your Grace I found the Scottes at this time the boldest men and the hottest that ever I saw any nation." A few years later King James, in recognition of the services rendered to his country both in peace and war by David Ker, confirmed the Charter of the lands of Ferniehirst and Corrosheuch with the castle, fortalice, manors and other pertinents, which Sir Andrew had resigned, and which were now incorporated by the King into a free barony of Ferniehirst.

In an English raid on the Border in 1544 David Ker and his son John were captured, but on giving their assurance to the English King were afterwards liberated. In support of this agreement, Ker gave some valuable inside information which, on becoming known to the Scottish lairds, raised such ill-feeling that they prepared to wage war with Ferniehirst. David was therefore summoned to appear before the Scots King at Edinburgh to answer the charges of treason libelled against him. There the wily Ker found it to his advantage to break his

compact with the English. Sir Andrew, the old and tried Border warrior, died in the latter part of 1544.

After the battle of Ancrum Moor, John Ker, eldest son and heir to Sir David, had audience with Lord Hertford. Ker pleaded, as he had tried faithfully and to the best of his ability to honour his oath to the English, that Ferniehirst should be spared. To this Hertford agreed, and with a view to the marriage of the infant Queen Mary and the son of the English King, later wrote to his master of this event, saying, "their said houses being pratie strong piles and towers shall serve for the better defence of the country." The Earl of Somerset, after the battle of Pinkie, came south with a large army, when the laird of Ferniehirst with several others gave their oaths of submission on 24th September 1547.

The English consequently held by military occupation various strongholds, including Ferniehirst. A large French army under the command of Sieur D'Essé arrived in Scotland in June 1548, their purpose being to assist the Scots in freeing their country from the English. This army reached Jedburgh in February 1549 and found it garrisoned by a few companies of Spanish soldiers, who evacuated the town on hearing of the approach of the French. Some months before this the English had made a surprise attack on Ferniehirst and captured the castle. The laird of Ferniehirst approached D'Essé and earnestly entreated his aid to regain his fortress. He declared that the English commander of the castle was a cruel and barbarous monster who had oppressed the surrounding country and committed every act of immorality of which the Moors were capable. The French chronicler of this campaign says: "All the time this monster lived in Scotland he never came across a young girl but he outraged her, never an old woman but he put her to death with cruel torture." Moved by Ker's appeal, the French general, in company with a number of Scottish gentlemen and soldiers, marched out with his forces against this forest-embowered fortress. Five of his officers with 200 arquebusiers and some foot-soldiers in corslets were instructed to advance in front of the main army. When within a bowshot of the castle, the French surprised a party of English arquebusiers taking up a position in a narrow and easily guarded defile in order to check their advance. The French immediately charged and

routed the defenders, who fled in disorder through the woods to the safety of the castle. They followed in hot pursuit up to the gate of the lower court, where ten of the retreating party, all at close quarters, were either killed or severely wounded. The foremost of the English reached the castle gate, which they entered and closed. Not being provided with the means of scaling the courtyard walls, this advance party of French and Scots found some tables close at hand which they used as shields against the showers of stones and arrows thrown from within. They bravely surmounted the walls and forced the defenders to retire to the keep, a large square tower in the middle of the castle. Round the donjon the French arquebusiers took up a position to enable the miners to excavate without molestation. After the first assault a breach was made in the donjon wall, which was soon large enough to admit a man. Up to this time the only casualty was a French officer with a bullet wound in the hand. Knowing their position to be desperate when they saw the arrival of the main army, the English decided to surrender, and with this in view their captain appeared through the breach offering to capitulate if the lives of the soldiers in the garrison were spared. D'Essé replied that he would only have unconditional surrender and that slaves should not dictate terms to their masters. The Englishman returned to his party with the news that there was no hope of a safe conduct. Renewing the attack, the assaulting party soon drove the defenders into the donjon, while a party of the Scots burst open the gate of the lower court. The terrified English captain knew he could expect no mercy if he fell into the hands of the furious Borderers. He therefore came through the breach and gave himself up as a prisoner to two French captains who, with characteristic courtesy, took him by the hand and were leading him away from the castle when one of the Scotsmen, recognising in him the ravisher of both his wife and daughter, rushed forward and with one blow of his axe severed his head from his body. The marchmen, elated with victory, raised the head on a long pole to display their vengeance, and with great glee marched forth and fixed it on a stone cross standing at the cross-roads so that wayfarers might see the trophy. The prisoners that fell into the hands of the Borderers were subjected to severe retaliatory treatment.

The French chronicler says that "They bought one from me for a horse; they tied his hands, feet, and head together, then placed him in the middle of a large field and ran upon him with their lances armed as they were and on horseback . . . until he was dead and his body hacked in a thousand pieces, which they divided among them and carried away on the iron points of their lances." Afterwards the main body of the French army returned to Jedburgh. In the "Diurnal of Occurrents" we find that the French occupied Ferniehirst for two months, but on 10th April they were driven out by the English when they captured Jedburgh. After nine years of war a peace treaty was signed in 1550, and two years later the laird was knighted for meritorious services in holding up the raids of the English. Sir John Ker, Warden of the Middle Marches of Scotland, died in 1562.

Sir Thomas Ker of Ferniehirst, his eldest son, was a staunch supporter of Mary, Queen of Scots. He openly showed his preference for the Catholic cause and the interests of the exiled Queen. In November 1569 an insurrection broke out in the north of England for the restoration of the Catholic faith and the liberation of Mary. When it failed, its two leaders, the Earls of Northumberland and Westmorland, had, for safety, to cross the Border. Northumberland was betrayed by Hector of Harelaw and delivered up to the Scots Regent who, at the head of an army, had come to Jedburgh to maintain order in the Borders. Kirkcaldy of Grange, Governor of Edinburgh, Ker's father-in-law, as a result reproved Ker for not rescuing Northumberland, who was later surrendered to the English and beheaded at York.

Westmorland and his wife were protected by Sir Thomas Ker and occupied a room in the tower of Ferniehirst Castle. Moray, with an army of 800 men, marched to Ferniehirst to relieve Ker of his prisoners, but 600 of these troops, whose sympathies lay with Westmorland, deserted. Moray, considering that the remaining force of 200 men was too small to accomplish the undertaking, returned in disgust to Jedburgh, saying that "he had only ridden out to view the woods." The fugitive Earl, although beset with danger through spies, ultimately escaped to Flanders.

To avenge the protection of the English rebels, an army

from England, under Sussex and Hunsdon, came against Jedburgh in 1570. Hunsdon and his party destroyed Hunthill by fire, then moved down the ridge to Ferniehist, which they captured and also burned. They then attempted to reduce to ruins the walls of the redoubtable fortress, but these were so strongly built that they defied the strength of the gunpowder charge. Hunsdon next ordered his men to tear down the main parts of the fortress. He reported that the result was as good as if the walls lay flat. Some two years later Ferniehist was again in the hands of its enemies, this time the Scots. The cause was a political difference between the burghers of the Royal Burgh of Jedburgh and Ker. The latter was attached to the interests of the Queen, while the citizens of Jedburgh espoused the cause of James VI. When a pursuivant was sent under Mary's authority to Jedburgh in 1571 to proclaim that everything was null and void which had been done against her during her imprisonment in Loch Leven, the Provost commanded him to descend from the Cross, where he had made this declaration, and caused him to eat his letters, thereafter loosed down his pants and gave him his wages on his bare buttocks with a bridle, threatening him that if ever he came again he should lose his life. In revenge for this insult and for other points of quarrel, Ferniehist made prisoners and hanged ten of the prominent citizens of Jedburgh, also destroying by fire the whole stock of provisions which they had laid up for the winter. But Lord Ruthven, with an armed force of Royal troops, came to the aid of Jedburgh, and Ker and his party dispersed and withdrew into places of strength during the night. The Scottish leader then marched against Ferniehist and succeeded in capturing the Castle, where a large number of Ker's followers made submission. It is recorded that the Royal forces destroyed "the biggins of Ferniehist, the cornes and all that he could be maister of," so as to give no cover or shelter to the enemy. They cannot have destroyed the Castle completely, since it was garrisoned until the latter end of 1572. Ker's estates were declared forfeited on 28th August 1571 and he was now driven from his lands and home. He went to the protection of Kirkcaldy of Grange in Edinburgh Castle. When that fortress was captured by the Scottish Regent in 1573, Ker's charter chest, which had been lodged

there for safety, was destroyed or lost by fire, and Ker escaped into the north of England to the protection of some of his sympathisers at Harbottle Castle. Owing to the hostility of Queen Elizabeth it was decided that he should retire to France, where he was nobly entertained by the King, who was pleased to bestow upon him a pension of four thousand crowns yearly for his services to his sister-in-law, the Queen of Scots. The King of Spain also gave him a pension of four thousand crowns, on which he subsisted during the thirteen years of his banishment. After Mary's death, King James called him home and restored to him his lands and fortune, also the office of Warden of the Middle Marches and Keeper of Liddesdale. The enjoyment of these offices was short, for in August 1585, for his supposed share in the death of Lord Russell, he was committed to ward in Aberdeen where, in 1586, he died of a broken heart.

His son, Sir Andrew, a man with a spirit as bold and independent as his father's, succeeded to the estates and offices. He seemed to have favoured the cause of the notorious Francis Stewart, Earl of Bothwell. Ker's share in the proceedings against the King were well known. Accordingly, he and the Provost of Jedburgh were summoned to appear before His Majesty on 10th September 1592, accused of having resorted and held communion with Bothwell. They failed to appear and it was resolved to declare them outlaws. Ker continued to aid and abet the designs of Bothwell, and when his cause was lost, the King and his Privy Council met at Jedburgh on 15th October 1593 to hold justice ayres for the punishment of offenders against the realm. Ker again failed to answer the summons and he was again denounced as a rebel. Afraid of the royal vengeance, he and his chief supporters went into hiding. As a result of his non-appearance it was decided not only to pass the sentence of outlawry but to render him homeless. As to whether the destruction of the home of the Kers was carried out or not there is no reliable report, but it is certain that shortly after these events the King restored to Sir Andrew his castle and lands, and the offices he had previously held.

In 1598 this historic house was rebuilt. Except for the ornamental turrets and a shot-hole here and there, it retains few features of a Border chieftain's fortress. The tower is reckoned to be of an earlier date than the rest of the building

and consists of four stories and the main doorway. Originally the building extended from the tower to the north, and there are still a few bonding stones left in its walls. A fine doorway in this wall leads to the old kitchen doorway and some dilapidated buildings formerly used by servants of the estate. The original kitchen to the south of the tower has a barrel-vaulted roof and the remains of a fine arched open fireplace. A newel stair, now in ruins, led to the upper chambers—those above the kitchen have long since disappeared. The main building consists of three stories. On the ground floor there are a succession of vaulted cellars, which may have been used as donjons, or for keeping prisoners. The middle floor is reached by a fine stairway in the tower. On it one enters a small sort of reception room, possibly a forechamber, which had also, by newel stair, connection with the old kitchen. A doorway connects to the main or banqueting hall, which contains a fine arched open fireplace. A door at the west end leads to a round chamber, which has a beautiful ceiling; this room was used as a library. A newel stair leads out of the banqueting hall to the upper floor. The latter consists of rooms opening out from each other according to the custom of the times. A newel stair also leads from the tower to the top story, by-passing the second floor; this stair at the tower end has its original door.

To the south-west stands a building believed to be much older than the Castle itself. It has a fine entrance doorway and is supposed to have been the private chapel. There are no traces of fireplaces in this building. Over the doorway are two panels enclosed in a stone frame or surround, the higher of which bears the initials of Sir Andrew Ker and his wife, Dame Ann Stewart. The lower is a shield bearing on it the initials A.K. beneath a chevron charged with three mullets. Built into the wall over the main doorway in the tower are two panels. That on the dexter side carries the former armorial bearings of the Kers. On a scroll at the top are the words "Forward in ye name of God"; and at the bottom of the bearings is the inscription

S	SOLI DEO
A·K	1 · 5 · 9 · 8

these being the initials of Sir Andrew Ker, with the motto "In God only." On the sinister side are the armorial bearings of his wife, Dame Ann Stewart, at the top of which on a scroll is the word "Forward," having beneath the arms the inscription

D SOLI · DEO
A·S 1 · 5 · 9 · 8

Sir Andrew Ker, it is said, was not blessed with wealth, and his wife, Lady Yester, rebuilt and restored Ferniehirst before her death in 1647.

A note on the Arms of Ferniehirst is attached:—

"The Arms of the House of Ferniehirst and the paternale Coat of the Name of Carre both in England, Scotland, France, and Ireland, and is thus blazoned: the Field is Gules—one a Cheveron Argent—three Mollets of the first ensigned with a Helmet, thereupon a Mantle gules doubled argent on a Wreath argent and Gules a Stag's Head erased or, for the crest their Motto tout droit, englished Right Forward.

This Coat of Armes is of a very noble Composition. As for the Field it is for the first and noblest coloure which is reid and called Gules in Heraldry, it betokeneth Nobleness of Courage and Valorous Magnanimity (sayeth Gilume). As for the Cheveron, it is silver and is called argent in Heraldry and betokeneth unstained Honour, Innocency and Chastity which is the two Tinctures this Coat is made up of. Now as for the charge, which is one a Cheveron three Mollets; the Cheveron in Heraldry is one of nine honourable Ordinaries, is a most ancient charge. It was the Coat of Guy, Earl of Warricke, before the Conquest. It resembleth the Front of a Battle and betokeneth the Bearer to have done some great service in the Field (especially a Reid Field) and doth also signify the achieving or finishing of some notable Enterprise. As for the Mollet, it is taken for a Spure roull and signifies the Bearer to have done some noble act as a Chevalier upon Horseback and is much esteemed of in Heraldry. The Stag's head denotes Watchfulness and being erased sheweth strength. The Motto signifies Resolution.

How changed is the scene from the stormy days of Border strife! The band of armed retainers is a feature of the distant past; the clang of steel no longer sounds through the wooded glen; the marching of armed men is heard no more. The impressive stillness is broken only by the sough of the wind and the song of the birds in the surrounding glade. Ferniehirst, the peaceful home of the Kers, had as its last tenant that grand old veteran of the Crimea, and one of our sporting gentlemen, the late Major Paton of Crailing, who removed in

1889. The Castle is now a youth hostel and has been taken over by the Commission for Ancient Monuments in Scotland.

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QUEEN MARY'S HOUSE, JEDBURGH.

By JOHN RENILSON, F.S.A.Scot.

"A kind of old Hobgoblin Hall,
Now somewhat fallen to decay,
With weather stains upon the wall,
And stairways worn, and crazy doors,
And creaking and uneven floors,
And chimneys huge and thatch'd and tall."

T. S. Smail.

THE Castle of Jedburgh, a very large and strong building, which stood on the summit of the hill overlooking the town, dominated the whole of Teviotdale. The Castle, some nine miles from England, was garrisoned just as often by the English as the Scots. In 1409, after a long and strenuous siege, it was taken from the English by the commons of Teviotdale. By order of the Scottish Government the whole building was destroyed and levelled to the ground as a menace to the country. In its place, six houses with the features of the old Border peel towers were built round the town for protection in times of siege. These were known as "bastel hooses," a type of building peculiar to the Borders. One of them was built in a part of the town known at that time as "Limmerfield," and is now the site of Queen Mary's House. The street in which this old house is situated received its present name of "Queen Street" in memory of Mary's temporary residence. The other "bastel hooses" have all disappeared.

William Allison, a Bailie of the Burgh, was owner of the house previous to 1561 and up to 1572, when the old Book of Sasines ends, so that he was proprietor in 1566 when Queen Mary occupied it. In 1656 a Supplication was given into the Council by Elizabeth Douglas, Lady Stob's liferenter, and William Elliot, her lawful son, heritor, of tenement of land, yard, and orchard now pertaining to them lying within the Burgh of Jedburgh, in the gait called Walkergait, sometime pertaining to William Allenson, lying upon the south side of

the street—craving permission to enclose a piece of ground of about 20 feet. This was granted on payment of £30 and a feu-duty of four shillings per annum. From the title deeds it would appear that a Charter of Adjudication was granted by the Magistrates of the Burgh of Jedburgh in favour of the deceased William Ainslie of Black Hills, dated 3rd February 1694, and that there proceeded upon the same two infeftments in favour of Sir Patrick Scott in 1704. On 4th July 1740 Sir John Scott of Ancrum disposed the property to George Kemp, Town Treasurer of Jedburgh, for himself, and in the name of the Magistrates, Town Council and Community of the said Burgh, the price of the property being £200 stg. The right of the Dask or Seat in the Kirk of Jedburgh was included in the conveyance. On 13th June 1743 the Most Hon. William Henry, Marquis of Lothian, Lord Provost of the Burgh of Jedburgh, the Bailies and Councillors thereof, in respect of a payment of £200 stg. by Sir William Scott, brother german to Sir John Scott of Ancrum, as the true worth of the property, disposed the same to the said Sir William Scott. The deed, although signed apparently by the whole of the Town Council, does not contain the signature of the Marquis of Lothian.

On 16th December 1751 a Minute of Sale of the property was entered into between Sir William Scott of Ancrum and Alexander Lindesay in Swinside, Commissioner to the Duke of Roxburghe, under which Sir William sold to Mr Lindesay the whole of the property: "all and haill that land or lot, high and laigh, back and fore, with the yeards, plots, grass, fruit, and fruit trees, including the Dask or Seat in the Kirk." The price was £240 stg. In regard to the Dask, it gave its position "in the South side of the West end of the Kirk of Jedburgh bounded betwix the seat belonging to William Ainslie, Apothecary in Jedburgh, on the west, the seat belonging to Archibald Jardine on the east, the pillar at the west side of the pulpit on the south, and the entry leading to the session table on the north parts." Dr Robert Lindesay succeeded and took infeftment on 14th July 1777. He was succeeded by Robert Lindesay Armstrong as the nearest and lawful heir to the Doctor, his grandfather. His successor, in turn, was Adrian Petrovitch Latchinoff, Colonel in the Russian service, a nephew of Robert Lindesay Armstrong. The property then passed into the

hands of Alexander Scott, a London tailor, and later to the Scottish Episcopal Church, from whom it was bought by F. S. Oliver of Edgerston, who presented it to the town of Jedburgh.

The quaint turreted building is an oblong structure three storeys high, set with its length from north to south and with a small four-storeyed wing projecting from the centre of the east wall. The architectural features of the house are fully characteristic of its age. The masonry is of good coursed rubble in three kinds of freestone—red, yellow and grey and harled—the dressed stones at the various openings being all carefully wrought. The roof was originally thatched; the thatching water runnels are still to be seen on the base of the chimneys. Some fifty years ago the house was stripped of its thatch and roofed with red tiles. The gables are corbie-stepped, and the building extended much farther to the south. That such buildings existed is proved not only by universal custom, but also because sundry bonding tusks still exist which have been designed to engage the original walls. Evidence of this is visible on the south gable, where fourteen feet of the old foundations have been exposed. Oyster-shell pinnings in the masonry of the outer walls are quite distinct, a style of pinning which was extensively used in the sixteenth and seventeenth centuries. The house as it stands measures 49 feet 6 inches by 22 feet by 26 feet high, and has undergone extensive alterations according as the whim or necessity of the successive owners dictated. These improvements, as far as practicable, have been taken away, bringing the house to a state corresponding to the time of Queen Mary. Near the south end of the main building a plain arched portal 5 feet 6 inches by 7 feet 6 inches leads through the house, from west to east, to the inner courtyard. These courtyards were on the east side of the house and surrounded by a high wall. The portal was defended by double gates or doors and sliding bars. The crooks of the gates are still showing. The present iron studded on the west end is quite modern. Above the portal on the west side are the armorial bearings of Kennedy impaling Scott as wife's arms. The Kennedys were a prominent family in the south, their arms being "argent on a bend sable, a ribbon dancette of the field," surmounted with a helmet and closed visor. Motto: "Avis la fin" (Look to the end). The Scott arms are on a

"bend azure, a mullet between two crescents of the field" surmounted with a helmet and open visor. Motto: "Solum Deo confido" (I trust in God alone). The windows of the building, except the seventeenth-century insertions in the basement, have safety arches over the lintels on the outside walls. They were also all iron stanchioned. These irons have been removed, but the socket-holes of the stanchions are visible in the sills and lintels of the windows.

The entrance to the basement or ground floor in the olden times was by a low, narrow, arched doorway, 6 feet 4 inches by 3 feet 9 inches in the centre of the west wall. This was built up and converted into a window in the seventeenth century. At that time there was only one window in the walls of the main building of the basement. There are now five windows in this floor, two in the west wall, three in the east. Four of these windows were probably inserted during the seventeenth century. The disturbance involved in the surrounding masonry is clearly visible. The ground floor had no internal connection with the upper floors. The entrance to the rooms above was by an outside stair on the north gable, but this stairway has been removed and the arched doorway built up. The present entrance to the house, which is quite modern, is in the south-west corner of the wing on the east side of the building. This was formerly a window, and leads into a staircase-lobby, where access to the basements is through a communicating door. The noteworthy features on this floor are the barrel-vaulted roof or ceiling, which is on an east to west axis, and a cobble-stone floor. The basement is the strongest part of the building, the walls being from four to eight feet thick. When the house was under siege, all the women, children and valuables were, for safety, placed on this floor and the fighting in defence of the house took place from the upper rooms.

The building, tradition says, "has been destroyed six times in the wars of the Borders, and again each time rebuilt." It was used as a dwelling-house up to some twenty-five years ago. At that period there was a kitchen, maid's room, bathroom and scullery connected by a service passage on the ground floor. During the restoration of the house the modern partitions were removed, the cement floor was lifted and a seventeenth-century

flagstone floor revealed. As this was not the old floor-level it also was taken up and part of a cobble-stone floor was discovered on the original floor-level. On the east side of the north gable are four of the original shelves, 3 feet by 1 foot, built into the thickness of the walls. On the same gable is part of the original arched fireplace. It extended over to the west wall and measured 10 feet. The ceiling of the ground floor, as previously mentioned, is barrel-vaulted, and a good deal of the smoke-begrimed plaster still adheres to the vaulting. The marks of the grain of the wood of the centre-piece which was used in the construction of the vaulting are still quite distinct and easily traceable. This ceiling is almost the full extent of the building and measures 25 feet by 14 feet by 8 feet 4 inches to the centre of the arch. Part of this floor, 10 feet by 14 feet, at the south end, has not been fully restored, the twentieth-century cement floor remaining. The basement, which had no internal communication with the upper floors, bears ample evidence of having been used as a stable and subsequently as an outside kitchen. Ancient meat-hooks still attached to the vaulted roof, and part of a hand-propelled roasting-jack, all speak to cooking for large numbers. The roasting-jack, tradition says, is over three hundred years old, was hand-made, and embodies a feature of modern engineering—that of the free-wheel and worm drive.

To reach the upper floor one ascends a wide newel stair inserted in the eastern wing. This integral stair turns to the right and has fourteen steps 5 feet 3 inches wide. The landing at the top of the stair is part of the original floor of a room extending to the walls of the east and north of the wing, forming probably a "Speak a word room," measuring 10 feet 9 inches by 10 feet 7 inches by 6 feet 10 inches high. On the west side of this room is the modern entrance to the banqueting hall. In former times this was an aumbry in the "Speak a word room." The original doorway from the banqueting hall to this room was immediately to the south. In the north-east corner is the old fireplace. There are three windows to this room, all different sizes and levels, that to the north having two steps on the sill, for the purpose of giving a steady aim while defending the outside stair.

The banqueting hall measures 28 feet by 16 feet by 9 feet

3 inches high. In the east of the north gable is the old entrance doorway from the former outside stair, which was removed many years ago. This entrance was carefully guarded. The portal is checked for the usual double defence, there being an outer stout oak door and an inner iron "yett," the latter secured by a drawbar. This portal measures 5 feet 7 inches by 2 feet 10 inches and the wall is 4 feet 4 inches thick. In the east wall, 6 feet from this ancient doorway, there is a double aumbry 3 feet 3 inches by 1 foot 7 inches, with its original wooden shelf in the centre. In the centre of the east wall is the original fireplace measuring 9 feet 9 inches by 4 feet 7 inches. Inside the north jamb of the fireplace is the "Saut Buckie," or salt cellar, for keeping the salt dry. Salt was a precious commodity at that period. It also marked the dividing line of class distinction between guests and retainers—"Above or below the salt." To the south of the fireplace in the same wall is the old doorway leading to the upper floors. This opening measures 5 feet 4 inches by 2 feet 6 inches and has still the crooks or part of the old door hinges, the wall being 3 feet 3 inches thick. In olden times the low doors were a means of defence. The intruders had to stoop low when entering, which tended to knock them off their balance. They were thus placed at a great disadvantage and could not fight with the same efficiency. These doors had also trip-steps.

In the west of the north gable is a single aumbry 2 feet by 1 foot 7 inches, and in the west wall three arched windows measuring 3 feet by 3 feet 8 inches. In this wall there is also a large arched dresser which measures 5 feet 7 inches by 7 feet. The floor, now of wood, was originally flagstones. Traces of this stone floor, two inches below the present floor-level, were revealed during the restoration of the house. On the east and west walls stone corbels run continuously the whole length of the building, these being to support the upper floors and to give additional strength to the building.

At the south end a stone partition 2 feet thick divides the banqueting hall from the fore-chamber or withdrawing-room. At the south-east of this partition access is gained to the fore-chamber by a communicating door. Immediately to the west, inside the door, a garderober 5 feet 7 inches by 2 feet 9 inches was discovered in the thickness of the walls. The remnants

of a small window can be traced in the west wall, in the south wall a niche for holding a light, while in the floor are indications of the chute leading to the cesspit outside the building. The walls of the fore-chamber, 15 feet 7 inches by 13 feet 7 inches by 9 feet high, are panelled in the Queen Anne period. A press or cupboard, with four shelves 24 inches deep, is in the centre of the north wall of this room. In the south wall was the arched open fireplace, 6 feet 6 inches by 5 feet 6 inches to the centre of the arch. In the west of the south gable behind the panelling is the narrow entrance to the south part of the building, now demolished.

From the top of the landing of the lower or modern newel stair a narrow newel stair of 27 steps, 3 feet wide and turning to the left, leads to the upper floors. The stair is lit by a series of loopholes, with an outlook window near the top. It is very seldom that this style of spiral stair is built with a left turn.

The floors of the top storey in the main building are on a different level from that of the third floor of the wing. At the thirteenth step of this stair, access to a room in the wing is gained by a trip-step door 5 feet 6 inches by 3 feet. The room is 9 feet by 12 feet by 7 feet 9 inches high, and a fireplace in the west wall measures 3 feet by 2 feet 10 inches. In this wall there is a small press or cupboard. Two small windows face the east and south, and the walls are 3 feet thick. This room, tradition says, was occupied by Mary when she lay so ill with fever after her perilous ride to and from Hermitage Castle. A chamber both narrow and comfortless to our modern eyes, "so unworthy of royalty," as Miss Strickland writes in her *Life of Queen Mary*. The spacious suite of apartments on the opposite side of the staircase, one of which still bears the name of "Grand Room," is more likely to have been occupied by royalty as anteroom, privy chamber, and bedroom.

Four steps up on the newel stair lead from Mary's bedroom to the guardroom. The entrance doorway is 5 feet 3 inches by 2 feet 9 inches, and here is fixed the original door from the outside stair of the banqueting hall—an old weather-beaten door made from home-grown oak. It has no dovetailing. On the front three boards are vertically, and on the back five boards are horizontally, placed and held together with hand-made nails driven through the boards and clinched at the back.

It still retains its original wooden handle. The marks of the battle-axe over the keyhole are *prima facie* evidence of besiegers. The door is over four hundred years old and is fixed here for preservation. The guardroom is divided by a thin wooden partition into two rooms. The larger, 31 feet by 15 feet 9 inches, has three windows, 3 feet by 2 feet, on the west wall, and one on the east wall. A fireplace, 5 feet by 4 feet 6 inches, is in the east corner of the north gable; and in the west corner an opening, 5 feet 3 inches by 2 feet 9 inches, probably the entrance from an outside stair. The smaller room, 13 feet by 15 feet 9 inches, has two windows, one in the east and one in the west wall, each 3 feet by 2 feet. In the south gable is a fireplace 3 feet 6 inches by 3 feet, while in the west of the same gable a doorway, 5 feet by 2 feet 9 inches, leads through to the demolished extension. The height to the centre of the ceiling, which is sloped by the oncoming of the roof, is 10 feet. These rooms were used for the defence of the house.

Ten steps up from the guardroom by the old newel stair is a small barrel-vaulted room on a north to south axis, measuring 10 feet by 8 feet 8 inches by 7 feet 3 inches to the centre of the arch. In the gable, which faces the east, a fireplace, 2 feet 10 inches by 2 feet 10 inches, is inserted. Three small windows, one each to the north, east and south walls, may have been used for outlook and defensive purposes. The walls in this room are 3 feet 5 inches thick and the doorway measures 5 feet 4 inches by 2 feet 6 inches. A press is in the south of the west wall.

The house has a somewhat lugubrious appearance, as if conscious of its connection with the most melancholy tale that ever occupied the stage of history.

Some of the Jethart pear-trees, forming part of the orchard, are believed to have stood from a period before the Reformation. The garden grounds behind the house extend to the river Jed, close to the old and picturesque bridge. "If only they could speak!"

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DISPARAGING PLACE-NAMES OF ROXBURGHSHIRE.

(Contributed to the "*Transactions of the Hawick
Archæological Society*," 1948.)

By GEORGE WATSON, M.A., F.S.A.Scot.

A SUBJECT of more than casual interest which has escaped students of our local nomenclature is that of a category of place-names implying aspersion, opprobrium, disparagement, or at times derision. Such land-names are by no means few, even in our own county; but their grand total is the less obvious since they are so widely scattered, or, since the significance of many has been lost, often by reason of a disguised form. A study should reveal a varied body of illuminating nomenclature and may show that many of the earlier inhabitants did not have an exalted opinion of the scene in which their lot had been cast.

A few of these indicate that when the names were first applied the nature of the land made farming barely—if at all—profitable, probably because of poor soil. Thus a former farm near Forkins in Rulewater (shown on Stobie's Map, 1770) was named Unthank. Now much better known is the farm of that name in Ewes Water; at least two others are so called in Northumberland, and there was a land bearing the same name at Perth. This land-name is derived from Old English "unthanc," signifying "ingratitude," and, as applied to land, must refer to its unprofitable cultivation. The Flemish place-name Ondank (site of a large timber dump during the First World War) is of similar origin and signification. In the neighbourhood of Redden lies Thankless, a farm-name (found in "retours" of three centuries ago) which, of more obvious formation, appears similarly to refer to "barren or unfertile soil."

Whoever bestowed the original appellation on Menslaws

formed a poor opinion of the qualities of that farm. The modern name is apparently wrong, for no "laws" rear their summits near-by. Stobie perceived the incongruity, and trying to "correct" the name, blunderingly misspelled it as "Manslees." Now a very early spelling (1571 in R.G.S.) shows that the more original form was Mensles, a name apparently referring to an estate of "menseless" (*i.e.* untidy, uncleared) ground. Though the present literary form is found as far back as 1574 (in R.G.S.), the older spelling is supported not only by Gordon's Map (1654), but also by the current vernacular pronunciation. When Hertford overran most of this county in 1545, he destroyed many homesteads in Bowmont valley, including "Mowe, Mowe Meusles, Clifton Cote," and others. Obviously the second of these three names contains an error; and if presumably instead of "u" we should read "n," then in Mow Menseless we have apparently another instance of an untidy, uncleared farm or estate.

As early as 1361 the place-name Hungryflat in Liddesdale appears on record (Armstrong's *Liddesdale*, App. No. i, p. vi), apparently located near Mangerton. This land-name may well indicate that the soil of that level was "hungry," thus requiring much manure. The hill-name Hungry Law is found in two localities, one near Lilliesleaf, the other just east of the Carter Bar. And (sinister name!) there is a Dangerfield near Kelso as well as in Hawick.

In certain conditions water causes cold, wet soil to be scarce suitable for good grazing, and to be otherwise prejudicial to farming. Hence the name Sourhope, near the head of Bowmont. Similarly in certain soils, stagnant water sometimes gives rise to nauseous smells; and resultingly, aspersive names become attached to the locality, the habitation, or the drain. Such was the "foul toun," or (former) farm-place in Rulewater, now known to us as Fulton. Such was Foulshiels in lower Hermitage Water and also (another instance) east of Overton Bush in Jedwater—besides, of course, the well-known birth-place of Mungo Park in Selkirkshire. A spring called the Foul Well, situated near Braidhaugh onstead in Hobkirk parish, fell into disuse about 1880 because of its supposed deleterious effects. The word "foul" (Old English "ful") appears, disguised, in Phillhope ("the foul hope") in Roberton parish, in

Philip Hope (a reduplication) at the head of Kalewater, and nearer home in Philiphaugh, close to Hawick. Sometimes it appears undisguised, as in Foulledge, the name of a "sike" near the head of Northhouse Burn, recorded as Foulidge about 1850 and as Fouledge on the O.S. maps. The second element is not "edge," but "leche," signifying "a mire, swamp, or ditch." We find this element also in the Rulewater name Stanledge ("the stony brook"), now corrupted into Stonedge, and possibly also in Effledge, near Cavers.

Another "sike" bearing a vituperative name is the Lousy Drain (on Kirknowe Farm, Hobkirk), from which has emanated an offensive smell in hot weather, and into the noisome slime of which Rulewater schoolboys occasionally tumbled when miscalculating the distance of the leap across (Tancred, *Rulewater*, p. 301). At Denholm the East Burn is stigmatised locally as the Clarty Burn. For a similar reason, a lane which led to the top of Broughton Place in Hawick used to be called the Dirty Entries (Robson, *Story of Hawick*, p. 78).

This fact reminds one that a former farm on the Abbotsford Estate was named Clarty Hole, partly because of the miry or untidy condition of the place, yet partly because local people readily changed the name from the earlier Cartlie or Cartlaw Hole. Other instances of "hole" may bear an aspersive or perhaps a facetious application, though often the precise idea is not apparent. One is Muttonhole, name of a habitation south of Rutherford (and the alternative name of Davidson's Mains, Midlothian). Another is Pinglehole, the name of an isolated dwelling almost a mile south-west of Saughtree on Liddell: three centuries ago this name bore the plural form and thus may well refer to (conjectural) neighbouring pot-holes, caused by the limestone formation.¹ Still another instance of this suffix is found in Nickieshole, naming a solitary dwelling between Hounam and Whitton. Bogle Hole in Rulewater (see Tancred, p. 145) doubtless refers to the supposed haunt of a hobgoblin.

The supernatural, indeed, enters much into our local nomenclature, especially in the place-name Bogly Burn, designating various gloomy glens in this county. Bogle Knowe is shown

¹ In Scottish, "pingle" means a small saucepan.

on an old plan as situated somewhere between the Dunion ridge and Jedwater. And in upper Kalewater, Gaisty Law is shown at the head of Gaisty Burn.

Even the Evil One himself has been intimately associated with our county's nomenclature. Three and a half centuries ago the Caddron Burn, a brook so called from the deep, foaming pot-holes ("cauldrons") formed in its course southwards from near Singden, was known as Hell Caddron Burn (Mack, *Border Line*, p. 188). On Gordon's Map (about 1650) it appears as "Hellcadren Burn." Four centuries ago a brook forming a boundary of Blainslie was stigmatised as Hellburn. In an old map of the year 1772 a pool called Hell's Hole is shown in Catlee Burn (Tancred, p. 145). About five miles up Jed lies the farm of Earlsbaugh, appearing as Earlsheugh on Stobie's Map; but for some unknown reason the vernacular stigmatises it as Hellsheugh. The Evil One is commemorated in the Deil's Pool, a deep hole in the Borthwick Water (*Transactions*, 1909, p. 75), as well as the Devil's Cauldron "a deep pool in a burn" on Stonedge Farm—A. Laing, p. 30. The Deil's Dyke is another Roxburghshire name (*Border Magazine*, xv, p. 540), perhaps from the Catrail. The Deil's Den, commemorated by Walter Laidlaw (p. 57), is situated within the north-western confines of Jedburgh.

In older Scottish the word "lurden" or "lourden" signified "mean fellow, vagabond, sluggard." The name Lurden designates a locality near Hassendeanburn; while the suggestive name Lurdenlaw denominates a place of habitation about a mile north-west of Lempitlaw. In older Scottish "limmer" meant "scoundrel, worthless fellow." This throws a meagre light on the name of a small Jedburgh property somewhere near Queen Mary's House, which about three centuries ago was named Limmerfield. The name is of course familiar to readers of Scott's novels, who will readily recall that Bailie Nicol Jarvie was wont to boast that his Mattie was "near cousin o' the Laird o' Limmerfield." The word "carlin" is Scottish for "old woman, shrew, hag." Two craggy summits, each facetiously named the Carlin's Tooth, rear their heads to goodly heights, one at the head of Jed, the other in the hill range over against Mossypaul. Let us round up this group with a use of Randy (a wild, reckless person; a loose, disorderly

woman). The word occurs in the Randy's Gap, which is situated in a wild reach of the Border-line (Mack, p. 223).

Some names readily fall into a category of derisive or at times humorously taunting ones. Near Branhholm Braes stood an alehouse bearing the intriguing name of Scatterpenny, and much patronised by drovers in days of old. As the name implies, full many a penny would be spent (or rather misspent) in former times at this wayside tavern. (In Scottish, "scattercash" indicates a spendthrift.) If I recollect aright, there was a wayside house (perhaps a former ale-house) called Catch-a-penny between Morebattle and Yetholm; and there is a house of the same name at Burnmouth in Berwickshire.

Since "the Raw" describes a line of houses a short street (often merely one side, in fact), the name readily lends itself to disparagement. Thus we have Farthing Row, a small street leading off from Wilton Park Place (*Transactions*, 1945, p. 41). The name Rattenraw, applied until over a century ago to a line of dwellings about four hundred yards west of Hundalee Braeheads, evidently stigmatised that row of hovels. Thus scoffed, "The Raw" was demolished, so entirely that no ruin marks the site. A small line of houses bordering on the Jed near Canongate Bridge has long been known as Duck Row, presumably because the inhabitants in days long past kept ducks with which to replenish their winter larder: hence its derisive name given by other townspeople. Another row in the town was formerly termed Cock Raw, perhaps for a similar reason. Adjacent to Hounam a small terrace of houses has been jocularly named Thimble-row, because of having been owned and perhaps erected fully a century ago by a knight of the needle (and thimble).

The "Ha'" or "Hall" (properly farm-house, mansion-house) is a name that apparently lends itself to a facetious application. Hence we find the Gospel Hall as the name of a dwelling on Ruecastle farm, perhaps suggestive of an exterior resemblance to a religious meeting-house. For the very modest Hawick dwellings dignified by the names Saut Ha' and Thimble or Tummel Ha', I need only refer you to Mr Johnman's paper on the former in these *Transactions* for 1899. Shuttleha', a cottage in upper Teviotdale, was named jestingly from its being the abode of a weaver long ago. Similarly, Pirnie Hall, a row

of houses near Fairnington, was so named, it is believed, because reels were made here in former times (*Ber. Nat. Club's Proc.*, 1909, p. 55). Clockerhall, north of Hassendean, may fall within this facetious category. Corby Hall, near Harwood in Rulewater, however, is so called perhaps from its location on Corby Burn (conceivably a resort of crows or ravens).

A spice of derision may enter into the place-name Lightpipe Hall, a former hamlet situated near the main road almost a mile south of Jedburgh, and demolished in 1879. A picture preserved in Jedburgh Public Library shows that one of the three or more cottages was a two-storey house, and the name may have had allusion to the chimney sending up a steady smoke. Between Roxburgh and Stockstruther, according to Stobie's Map, another Lightpipe Hall was situated. The Borthwick Water quaint place-name Kinnlecuittie may have a somewhat similar signification.

Other habitations bearing jocular, humorous, or even sarcastic appellations are found elsewhere in our county; for example, "the Saut-market," applied to a row of cottages on Fairnington estate. Formerly, a lonely cottage stood on the wayside between Jedburgh and Crailinghall, and by its plaintive name of "Pity Me" seemed to invite sympathy from passers-by because of its solitude or lowly condition. Johnston's suggestion of a Welsh origin of this name is too far-fetched. Besides, the vernacular name is Peety Mei; and there is another Pity Me on an affluent of Reedwater, and a much more widely known example in the mining village of the same name in county Durham. Also telling of solitude is the place-name Stand-alane, aptly describing the situation of a cottage near Lintalee Burn that lingered till about a century ago. The expressive name is found elsewhere, as in the counties of Dumfries and Peebles, and at Falkirk. Even more significant is the name Seefew, designating dwellings near Belford in Bowmont valley and opposite Fairloans in upper Liddesdale. The former is now in ruins, if not removed: the latter is shown on Stobie's Map and on another early last century. Loneliness proved too much for the inhabitants.

Atmospheric agencies, too, made conditions uncomfortable for our land people. Stobie's Map exemplifies this fact in certain place-names, such as Coldhouse, a few hundred yards

west of Stouslie. Cauldshiels, south-east of Abbotsford, proved too cold even for our hardy ancestors, who erewhile (from at least the seventeenth century) precariously existed here. And so it deservedly lapsed; but the shielings are still commemorated by a hill and loch of that name. For full seven centuries a ravine in Teviothead parish has been known as Cauldcleuch; and the massive hill in whose side it snuggled is hence designated Cauldcleuch Head (1996 feet). On the shoulder of this bleak, lofty height rests Windy Edge. The name Wideopen, designating a habitation north of Yetholm, may indicate that the earlier inhabitants found it quite unsheltered from the elemental blast; and similarly the meaning of Windywall, a mile south of Sprouston, seems obvious. On the Border line at the head of Bowmont stand Windygate Hill and Windy Gyle (2034 feet)—names which speak of boisterous elements often reigning or raging there. And in upper Liddesdale, Windy Knowe, rearing its summit to a height of 1081 feet, must often be affected by blustering gales, especially from the south. Windy Edge, near to Tinnis Hill, raises its audacious head to a height of 999 feet to meet the tempests. A story of intense cold seems to be concentrated in the significant plane-name Hurklewinter Knowe, a hill rising to an elevation of 1450 feet south-east of Dinlabyre.

In this extensive arena of Border warfare, where much blood has been shed, one naturally expects to find some sanguinary associations; but no clear historical evidence is extant in respect of the majority of the place-names so distinguished. At the entrance to Branhholm Castle lodge runs a small brook called the Bluidy Burn—"a significant name," remarked Adam Laing (1901). Equally, if not more so, is the name Bloodylaws in Oxnam Water: the lands of "Bludylaws" are mentioned in a retour of 1603, and still earlier in a charter (dated 1479) as "Bludelawis." In *Guy Mannering* (chap. 36) Scott suggests another Bloodylaws at the head of Liddel.

For no less was Liddesdale a theatre of war or of raiding in those earlier times, when pursuit would be pressed to the very Border line and even beyond. The Bloody Bush, site of a former toll-bar on the boundary east of Dinlabyre, is presumed to have been so named from some sanguinary Border fray in pre-Union times (*Border Magazine*, 1921, p. 60). The name deserves fuller inquiry. Meanwhile we may note that a hill

named Bloody Bush Edge, rising to a height of 2001 feet, lies some four miles south of High Cheviot. In Bowden parish, Murder Moss probably tells of some dark deed in the forgotten past. But the Bloody Well, near Muirhouselaw, is so named because a dispute regarding its ownership resulted in a duel in 1716 between two neighbouring lairds, and ended with the death of the laird of Muirhouselaw (see the *Transactions* for 1922, pp. 18-20).

Traditional associations, however, are sometimes unreliable, since often merely legendary, or perhaps arising from fable or even fancy. Near Spittal-on-Rule, for example, lies a meadow called the Dead (or Deadman's) Haugh, where tradition or legend declares that James IV hanged many of the Turnbull clan in the year 1510. But in older usage "dead" signified "quite level"; and thus the name may rather mean the level haughland. The secondary name, Deadman's Haugh, may have arisen through inference by a later misconception. Nevertheless, I know not the precise locality, and thus may misjudge. It is noteworthy that there is another Deidhaugh in Hawick (*Transactions*, 1945, p. 38).

Dispute, however, was occasionally settled in the courts of, or by threat of, law, rather than in the field of combat. Lawsuit Law rears its modest head to a height of 825 feet south of Falla in Oxnam parish. Plea Shank lies on the Border line between the heads of Oxnam and Coquet: the dispute between the rival English and Scottish claimants for this stretch of the Border line is dealt with by Mr Mack (pp. 217-18). Also on the Border line, Plea Knowe rises to a height of 1656 feet just east of Mozie Law. Then also on the Border line are found (as one would expect) such places as Threap Cairn and Threap Lands (Mack, pp. 33, 48, 69, 85); but the more widely known Threepwood lies in the northern part of Melrose parish. In Roxburgh parish, and on Tweed opposite Makerston House, is an intriguing mound or hillock known popularly as the Plea Hill or Plea Law. On its summit is a shaped monolith bearing some chiselled initials, which may have some bearing on the history of the inferred dispute or law-plea.

A fair number of place-names indicate folly, ridicule, sarcasm, or facetiousness. Of the very few follies in this county the best known is the "Baron's Folly," situated conspicuously on

Down (or Duns) Law, Fairnington. This edifice was erected probably about 1785 by a proprietor who spent much time here admiring the extensive view. The reason for its being ridiculed as "the Folly" is not certainly known, though it may be due to its being regarded as an expensive structure yielding inadequate results. Yet one Rulewater laird thought that he could make such a structure pay. Thus it was that in the eighteenth century Henry Elliot of Harwood erected a thatched look-out edifice on rising ground whence he could get a bird's-eye view of his farm workers. This lofty look-out was stigmatised by his neighbours as "Elliot's Folly" (Tancred, p. 59).

Also in upper Rulewater was Jane Dice's Kirn (Tancred, p. 145), the name of a bend in Wauchope Burn where evidently the water raced round the turn so quickly as to be "churned" into foam. In the neighbourhood of Abbotsford a strip of fir trees remotely suggestive of a haircomb was named "the Doctor's Redding Kame," after Dr Douglas of Galashiels, who planted them about a century and a half ago. Pudding Law, a hill (1403 feet) at the head of Calroust Burn, is presumably a humorously descriptive name, with probable allusion to its shape. The Piet's Nest facetiously designates a solitary house perched on a steep hillside between Hyndlee and the Note o' the Gate. Near Teviothead, Gledsnest quaintly suggests the nest of the kite, but rather refers obliquely to its having been built by one named Gladstone (see Laing's *Branxholme Castle*, p. 35).

At Town o' Rule stands a house, built in 1815 for the shepherd, and bearing the aspersive name of Drythropple. The reason of the aspersion is that Tancred's father, who ordered it to be built, was a strict abstainer, and refused to give the masons the customary drink on the completion of their work. The aspersion has stuck, despite an attempt about 1850 to change the name to Heathfield (Tancred, p. 50).

Among many expressive place-names one comes across an occasional name that throws a bright gleam across the map, such as The Joy (south of Lempitlaw), Blinkbonny (in Liddesdale), Honeyburn, Honeyfield, as well as Sunnyside and Pleasance (in various localities). But the garnering of these we must leave to others.

THE ROMAN FORT AT CAPPUCK, 1949.

By SIR WALTER AITCHISON, M.A., F.S.A., F.S.A.Scot.

THE purpose of the small Roman fort at Cappuck (for which Dr I. A. Richmond has tentatively put forward the name Eburocastrum¹) was to secure Dere Street's crossing of the Oxnam Water. Not that the actual crossing can have been a difficult or dangerous one; but the basin of the Oxnam Water was, judging by remains evident to-day, densely settled in Roman times, and was, therefore, a weak spot in the Roman line of communication with the Forth-Clyde frontier. That circumstance and maintenance work on the ford or bridge, and on the line of the road itself, were doubtless good reasons for stationing a small garrison in permanent quarters at Cappuck.

Up to 1947 our knowledge of the station rested on the results of the excavation conducted by Miller and Stephenson in 1911.² But an air photograph taken by Dr J. K. St Joseph in 1947 showed crop-marks indicative of defences more extensive and complicated than would suit the small fort, with its simpler ditch-system and rampart, uncovered in 1911; and, as the Roxburghshire Inventory of Ancient Monuments is nearing completion, it was decided at once to investigate and identify the new features suggested by St Joseph's air photograph.

In September 1949, therefore, Dr Richmond made a long cutting through the southern defences of the fort, beginning in the clay backing of the rampart found in 1911 and ending at the outer edge of the most southerly ditch appearing in the air photograph.

His findings can be summarised as follows:

- (1) The fort had had, at different times, four ditches outside the southern rampart.
- (2) The rampart itself had twice been enlarged outwards and once inwards.

¹ *Archæologia*, vol. xc, p. 14.

² *Proc. Soc. Ant. Scot.*, vol. xlvii (1911), pp. 446 *et seq.*

(3) Of the four ditches two belonged to a Flavian occupation and two to Antonine times.¹

For clarity of description I designate the ditches A, B, C, and D, from north to south. The historical sequence, deduced from depth and character of ditch-fillings, natural and artificial (and from other evidence), seems to have been as follows:

Period 1. Corresponding with Agricola's advance into Scotland and the founding of the fort. Ditch A belongs to this period. But within a short interval the fort-rampart was enlarged so as to occupy the berm. Ditch A was therefore filled in, and a new one, Ditch B, dug some yards out.

Period 2. Abandonment of the fort, probably about A.D. 100, corresponding with the withdrawal of the northern garrisons south of the Cheviots.

Period 3. Re-occupation of the fort in early Antonine times, when the rampart was again enlarged outwards, Ditch B filled up, and two additional ditches, C and D, dug, further out again.

Period 4. More re-organisation in late Antonine times, involving a reduction in the size of the fort by building a new rampart so as to cut off its northern third, the enlargement inwards of the old rampart, the re-cutting of Ditches B and C, and the filling up of Ditch D.

This late "pulling in" of the outer defences confirms the date of the reduction in the size of the fort. In the 1911 excavation the construction of the north rampart of the fort was noted as being of a character different to that of the rampart on the other three sides, but the relationship of this to the whole of the defences is now much clearer.

The original north rampart (Flavian) as deduced from the ditches lay some 50 feet to the north. After A.D. 160 it was presumably decided that the purpose of the fort could be served by a smaller garrison. So the area of the fort was reduced to about two-thirds of its original size by building a new north rampart across the inner area and demolishing the original north rampart and gateway.

So ends the Roman history of Cappuck, so far as it is known to date.

A full report upon the excavation will, in due course, appear in the *Proceedings of the Society of Antiquaries of Scotland*;

¹ Flavian, A.D. 80-100; Antonine, A.D. 139-196.

but, as the site of the fort lies within the territory of our Club, I have been authorised by Dr Richmond to send in this preliminary note for the information of members.

Note.—References to Cappuck in previous numbers of the *Club History* occur in vol. xiv, pp. 382–389 (Pl. IX); vol. xxii, p. 56; and vol. xxvi, pp. 38–40 (Pl. IV).





Bronze Age Cist at Redden. With Eke-stones removed.

NOTE ON A BRONZE AGE CIST AT REDDEN FARM, SPROUSTON, ROXBURGHSHIRE.

By C. S. T. CALDER, A.R.I.A.S., F.S.A.Scot.

DURING ploughing operations, in October 1949, in a field called Horse Knowe Cairns on the farm of Redden (Mr D. Murray), a grave was discovered on the summit of a gently rising slope about 140 yards north of the road from Kelso to Cornhill.

A hole had been dug in the ground and in it a cist had been constructed of large slabs on edge forming the sides and ends, the whole being closed by a heavy cap-stone lying only a few inches below the present surface, which had been worn down by cultivation. The tops of the slabs were uneven in places, and, where low in alignment, the discrepancy was adjusted by the insertion of eke-stones on bed.

The cist was orientated north-east and south-west, and measured internally 3 feet 3 inches in length, 1 foot 9 inches in breadth and averaged 1 foot 6 inches in depth to the natural sandy subsoil which constituted the bottom.

In the infiltrated silt, which had accumulated to a depth of about 6 inches on the floor, the fragmentary remains of the skeleton of a young adult male were found. The body had been laid in the usual crouched position of the period and was lying on its left side with the head to the south-west. Between hands and knees rested a food vessel and a flint blade.

The food vessel, which had a double carination, measured approximately 5 inches in height and 6 inches in widest diameter, and was decorated with whipped cord impression.

The blade was of grey flint and measured 3·4 inches by ·7 inches.

A fuller account is to be published in vol. lxxxiii of the *Proceedings of the Society of Antiquaries of Scotland*.

APPEAL BY THE COUNCIL OF THE BERWICKSHIRE NATURALISTS' CLUB.

THE Council of the Berwickshire Naturalists' Club, which covers the whole of the south-eastern Borders of Scotland and the northern portion of Northumberland, makes a special request to all landowners, farmers, ploughmen, and shepherds in these areas.

Whenever the plough turns up obstructions such as grave-stone slabs, or indeed *any* object that looks uncommon, the find should be reported, *immediately and in the first instance*, to either of the undersigned—whoever is the nearer—so that he may visit the site as soon as possible. Pending such visit, temporary fencing should, if necessary, be put round the site.

It is particularly important (1) that no unofficial digging should be done on the site—if it is a grave—as damage may be caused to objects of great potential value to experts in enabling them to fix the age of the remains; (2) that nothing should be removed from the site.

As examples of unwitting damage already done to objects necessarily brittle through age, a skull and a valuable food bowl were broken recently simply by being prodded with a stick; while on another occasion only a ring-like object was turned up, and was thrown away as apparently useless. In the latter case plenty of bones were found, but nothing else to indicate the age of the burials, as the ring might have done.

This request is not intended to bypass either the central antiquarian authorities for Scotland, or members of the local press (who have always proved most helpful). It is made solely with a view to the initial preservation of tangible information

likely to throw light on Border history and customs from the earliest times.

H. H. COWAN,
Secretary, B.N. Club,
The Roan, LAUDER.
(Phone: LAUDER 217.)

A. A. BUIST,
Editing Secretary, B.N. Club,
Kirkbank, KELSO.
(Phone: CRAILING 53.)

Note.—Following on the Redden “find,” in the course of which certain well-intentioned but unofficial interference with the site had taken place before the arrival of representatives from the Ancient Monuments Commission, the Council thought it advisable to circulate the above notice in the Border Press.

A. A. B.

OBITUARY NOTICES.

MRS JOHN BISHOP.

THE Club has suffered a serious loss in the death, at Hawick, in February, of Mrs John Bishop, Berwick-on-Tweed, a member of the Club since 1925, and for long its representative both at home and in the Dominions at the Annual Conferences of the British Association. She accompanied her husband in this capacity both to Canada and South Africa, and after his death, in 1935, visited India. Local schools and the Berwick Women's Institute benefited frequently from talks on her travels abroad. In her accounts of B.A. proceedings she revealed a style both exuberant and graphic. But she was also a most conscientious reporter, and it will be hard to find her successor.

MISS MARGARET WARRENDER.

THE grandniece, companion, and biographer of Lady John Scott, Miss Warrender must, at the time of her death in April, have been the second oldest member of the Club. Owing to her great age and permanent residence in London, she was one of the Club's three honorary members. But as recently as 1942, at the age of eighty-seven, she wrote to Mr Cowan, to present the Club with a version of "The Ballad of Twinlaw Cairn" in Lady John's handwriting, which was found amongst her papers during the last war (see vol. xxx, Part III, pp. 230-232). Miss Warrender's maternal grandmother was Lady Hume Campbell of Marchmont, Lady John's only sister. It will be remembered that it was at Marchmont the latter discovered the original version of "Annie Laurie" in an early collection of Scottish songs, and how she subsequently amended and amplified it, and set it to music in its present form. Miss Warrender was laid to rest beside her grandparents in Polwarth Churchyard, a few feet from the vault where Sir Patrick Hume, afterwards 1st Earl of Marchmont, lay in hiding during the "killings," and was fed by another poetess, his daughter, Lady Grizel Baillie.

NOTE ON "IVY AND OTHER POEMS" BY T. MCGREGOR TAIT.

It is not often that an opportunity is given for the review of a book of poems in the Proceedings of a society primarily scientific and antiquarian. For it would certainly be discourteous to Mr Tait to pass by his small volume with a perfunctory wave of the hand. Here is good gear in small bulk: indeed, a rather bewildering versatility. Villanelle, ballade, sonnet, lyric, rhyming couplets, pour after one another, without much regard for arrangement of form or subject-matter. On the first page, for example, a sonnet on the Abdication of Edward VIII is immediately succeeded by a "Council Comedy," and thereafter by an ingeniously rhymed "boost" for the "Neanderthal Man." Later on, the first of two poems on "Evolution" precedes "Shopping Week" (a tragedy), and two short lyrics, "January" and "Blawearie"—to the present reviewer the best things in the book. The sonnets, "The Thrush's Throne," with the triumph of spring nest-building over even a major world catastrophe; and the martial and patriotic "Berwick-on-Tweed," are also worthy of notice. The poetic urgency is there all right, but Mr Tait would be well advised to impose some sort of restraint on his exuberance, *e.g.* by a division into grave and gay. Here and there, too, his ear fails of a rhyme, and in the "Sonnet on John Bishop," which appeared in last year's *History*, the simple word or phrase could be substituted for the more grandiose without loss to the whole. But one must admire the obvious sincerity and zest for life which here, in one garb or another, demands expression in verse.

INSECTS FROM BERWICKSHIRE.

By W. B. R. LAIDLAW, D.Sc.

HYMENOPTERA:

APIDAE:

- Bombus terrestris*. General.
,, *lucorum*. General.
,, *soröensis*. Coldingham Moors, 1935, 1948, 1949.
,, *lapidarius*. Coldingham, Eyemouth.
,, *agrorum*. General.
,, *muscorum*. Coldingham Sands, 1945, 1948, 1949.
,, *hortorum*. General.
,, *distinguendus*. Coldingham Sands, 1945, 1947.
,, " Eyemouth, 1948, 1949.
,, *jonellus*. Abbey St Bathans, 1938.
,, *pratensis*. General.
,, *lapponicus*. Eyemouth Golf Course, June 1950.
Psithyrus bohemicus. General.
,, *rupestris*. Coldingham Sands, 30/8/35.
,, *barbutellus*. Coldingham Sands, 26/5/48.
,, " Eyemouth, 1950.
,, *sylvestris*. Coldingham Sands, 26/5/48.
,, " Eyemouth, 1950.
Megachile centuncularis. Coldingham, 1948.
,, *circumcineta*. St Abbs, 1948.
,, *ligniseca*. Eyemouth, 1949.
Anthophora furcata. Coldingham, 25/6/48.

ANDRENIDAE:

- Sphecodes gibbus*. Coldingham, 28/8/35.
Halictus rubicundus. Coldingham, 28/8/35.
Andrena rosae. St Abbs, 21/4/48.
,, *Trimmerana*. St Abbs, 25/4/48.
,, *nigro-aenea*. Coldingham, 8/5/48.

VESPIDAE:

- Vespa vulgaris*. General.
 „ *germanica*. General.
 „ *sylvestris*. General.
 „ *norvegica*. Abbey St Bathans.
 „ *rufa*. Abbey St Bathans.
 „ *austriaca*. Coldingham, 14/6/48, 18/6/48.
 „ „ Eyemouth, 27/6/49.
Odynerus parietum. Coldingham, 26/7/47.
Chrysis ignita. Coldingham, St Abbs, Eyemouth.

SPHEGIDAE:

- Crabro* spp. Coldingham, 28/8/35, 26/7/47.

TENTHREDINIDAE:

- Diprion pini*. Male and female, Edgarhope, Lauder, June 1947.

SIRICIDAE:

- Urocerus gigas*. Coldingham, 15/8/47.

LEPIDOPTERA

(RHOPALOCERA):

PIERIDAE:

- Pieris brassicae*. General.
 „ *rapae*. General.
 „ *napi*. General.
Colias edusa. Flight at Coldingham, August 1947.

NYMPHALIDAE:

- P. atalanta*. General. Swarming Autumn 1949.
V. io. Coldingham, 1948.
 „ „ Eyemouth, September 1949.
 „ *cardui*. Coldingham, September 1948. With larvæ.
 „ „ Eyemouth, August-September 1949, 1950.
 With larvæ.
V. Urticae. General.
Argynnis aglaia. Coldingham, St Abbs, 1947, 1948.

SATYRIDAE:

- Hipparchia semele*. Coldingham Sands, 1947, 1948, 1949.
Epinephele jurtina. General.
Aphantopus hyperanthus. Coldingham, St Abbs, Eyemouth, July 1947, 1948, 1949.
Coenonympha pamphilus. General.

LYCAENIDAE:

- Chrysophanus phlacas*. General.
Aricia medon (artaxerxes). Coldingham Coast, July 1947, 1948, 1949.
Polyommatus icarus. General.
Cupido minimus. Coast, 1948, 1949, 1950.

(HETEROCERA)

SPHINGIDAE:

- Smerinthus populi*. General.
Macroglossa stellatarum. Coldingham Sands, 2/8/47.
 „ „ Eyemouth, 26/9/48.

ARCTIDAE:

- Arctia caja*. St Abbs, 17/7/48.

NOCTUIDAE:

- Cerapteryx graminis*. Coldingham, 26/7/47.
Noctua xanthographa. Coldingham, 20/8/47.
Naenia typica. Coldingham, 20/8/47.
Bryophila perla. Coldingham, 20/8/47.
Acronycta rumicis. Coldingham, 16/6/48.
Noctua brunnea. Coldingham, 1/7/48.
Mamestra brassicae. General.
Miselia oxyacanthae. Coldingham, 3/10/48.
Hydroecia petasites. Coldingham, 3/9/48.
Euplexia lucipara. Eyemouth, 1949.
Phlogophora meticulosa. Coldingham, 7/6/48.
Eurois occulta. Coldingham, 16/8/48.
Plusia festucae. Oxton, near Lauder, 1918.
 „ *iota*. General.

GEOMETRIDAE:

- Ortholitha limitata*. Coldingham, 25/7/47.
Cidaria fulvata. Coldingham, 26/7/47.
Campptogramma bilineata. Coldingham and general.
Hybernia defoliaria. Coldingham and general, 26/11/47.
Boarmia repandata. Coldingham, 15/7/48.
Oporabia dilutata. Coldingham, 16/10/48.
Phigalis pedaria. Eyemouth, 15/2/50.

ZYGAENIDAE:

- Zygaena filipendulae*. General.

HEPIALIDAE:

- Hepialus humuli*. General.
,, *lupulina*. General.

PTEROPHORIDAE:

- Orneodes hexadactyla*. St Abbs, 15/5/48.

COLEOPTERA:

SCARABAEIDAE:

- Aphodius prodromus*. Coldingham, 29/2/48.

STAPHYLENIDAE:

- Creophilus maxillosus*. Eyemouth, 30/9/48.

CRYPTOSTOMIDAE:

- Cassida rubiginosa*. Coldingham, Eyemouth. Frequent on
Field Thistle.

ORNITHOLOGICAL AND OTHER NOTES.

THE outstanding points of interest for ornithologists during 1949 were (1) the great increase and extension of range of the *Pied Flycatcher*: 5 pairs at the Hirscl in 1948 to 14 pairs in 1949; and 2 pairs at Edrom (*nil* previously). (2) The occurrence of the *Little Owl* in Berwickshire for the first time: 3 seen at Charter Hall on 2nd September; 2 shot. (3) The occurrence of 12 *Barnacle Geese* among a flock of 150 *Pink-footed Geese*, on Greenlaw Moor, on 20th November. The Barnacle Goose is extremely rare on the East Coast and is essentially a bird of the coast.

ORNITHOLOGY.

Date in 1949.	Species.	Seen by	Place and Remarks.
Jan. 8.	Kingfisher.	Col. W. M. Logan Home.	Edrom House burn.
Jan. 12.	Stonechat ♂.	,,	Three-quarters of a mile south of Grants house, on the road from Duns.
Feb. 12. Aug. 30.	10 Siskins. 1 Siskin.	,, ,,	Edrom larch wood. Edrom drive.
Feb. 23.	30 Bramblings.	,,	Edrom park.
Mar. 7.	Pair Gadwall.	,,	Greenlaw Moor (pre- vious record, 1921, Duns Castle lake).
Mar. 29. and Apr. 16	Marsh Tits.	,,	Edrom park.
Apr. 25 and 28.	1st Pied Flycatcher ♂. ,, ♀.	,, ,,	Edrom drive. Occu- pied nest-box on May 10.

Date in 1949.	Species.	Seen by	Place and Remarks.
May 1.	2 Blackcaps ♂.	Col. W. M. Logan Home.	Dundalk Wood (Hirsel grounds).
May 13.	2nd pair Pied Flycatchers.	„	Edrom river-bank, oc- cupied a nest-box.
May 12.	Pair Tree-sparrows.	„	Occupied a nest-box only four feet above ground; an unusual place, and many Edinburgh ornithol- ogists came to see this.
May 22.	Black-tailed Godwit.	„	Greenlaw Moor.
„	Pair Shovellers.	„	„ „
June 11.	2 Oyster- catchers.	„	Whiteadder river at Edrom House.
June 17.	5 Young Pied Flycatchers flew from nest-box.	„	Edrom House; the 5 young and 2 parents were seen on June 18 by a number of ornithologists from Edinburgh. The birds all disappeared by June 22.
Aug. 28.	Wheatear, ♀.	„	Edrom village; a very unusual place for this species, which is a bird of the moorlands.
Sept. 2.	3 Little Owls (<i>Athene noctua</i> <i>vidalii</i> .)	Capt. H. Trotter. Major H. Douglas-Home.	Charter Hall Estate; the first record for this bird in Berwickshire.
Sept. 18.	Barn Owls nesting in a hollow tree.	Col. W. M. Logan Home.	Edrom House drive. A very late date for the nesting of this (or any other) bird. The young barn owls flew from the tree on Sep- tember 25. Could be heard "snoring" from the front door!

Date in 1949.	Species.	Seen by	Place and Remarks.
Oct. 23.	2 Gadwall.	Col. W. M. Logan Home.	Greenlaw Moor.
Nov. 20.	12 Barnacle Geese (<i>Branta leucopsis</i>).	„	Greenlaw Moor. Seen among a flock of 150 pink-footed geese. The whole flock flew away to the N.W. and were not seen again.
Dec. 5, 17, 19, 26.	30 Waxwings. 8 „ 1 „ 1 „	„	Castle Dene river-bank; the waxwings were feeding on the haw- thorn berries, in com- pany with many field- fares, redwings, black- birds, greenfinches, and even a robin. The one on 26th was seen at Edrom, feed- ing on fallen haw- thorn berries.
Nov.	20 Waxwings.	T. McGregor Tait.	Castle Dene park; strip- ping berries off orna- mental shrubs.
Jan. 1.	Large numbers of Goldeneye and Goosander.	A. M. Porteous.	River Tweed.
Feb. 13.	Marsh Tit.	„	Nuns' Walk, Coldstream.
Feb. 23.	Pair of Oyster- catchers.	„	Lees banks, Coldstream.
Nov. 3.	Flock of Willow Tits and Siskins.	W. B. R. Laidlaw.	Garden near Ayton.
Dec. 27.	1 Waxwing.	„	Biglawdean garden near Ayton. The bird sat at top of an apple tree all day.

ENTOMOLOGY.

Date in 1949.	Species.	Seen by	Place and Remarks.
Oct. 15.	2 Painted Ladies (<i>P. Cardui</i>).	W. B. R. Laidlaw.	Biglawdean, near Ayton.
Nov. 7.	1 Red Admiral.	„	Biglawdean, near Ayton.
Mid- summer.	Springtails (<i>Collembola</i>).	W. B. R. Laid- law and H. H. Cowan.	From The Roan, Lauder. A primitive form of insect which runs, flies, and appears to bite.

Note.—Owing to no dates having been given, Botanical Notes are held over.

NOTE ON MEETING OF BRITISH ASSOCIATION AT NEWCASTLE.

By A. A. BUIST.

IN view of the death of Mrs John Bishop, referred to elsewhere in this number, it has been considered as possibly of interest to compile a summary, necessarily incomplete, of the activities of the Association at their Annual Meeting during the week 31st August to 7th September 1949. These, in the main, apart from the Presidential and Sectional Presidential Addresses, took the form of sectional, or intersectional, discussion groups, following on individual papers. All may be found in detail in the Association's quarterly, *The Advancement of Science* (to which the Club subscribes), vol. vii, Nos. 23, 24, and 25. The Newcastle meeting was the one hundred and eleventh of the series, and the fifth (a record) in that city, the last held there being as far back as 1916, under First War conditions.

From the standpoint of the more general reader, two of the most interesting papers are those on "A Plea for a Museum of English Life and Traditions," read to the Anthropological and Archæological Sections, and, by an Inspector of Schools, on "Education and the Rural Community."

In the first, it is pointed out that an appeal for a purely English National Museum, on the model of those at Stockholm (financed by the Skansen Folk Park) and in the other Scandinavian countries, was made as far back as 1903 by Dr F. A. Bather in his Presidential Address to the Museums Association, and supported later by, amongst others, Mr Robertson Scott, for long Editor of *The Countryman*. Nothing has come of this appeal, nor, except in Wales and the Isle of Man, of a Royal Commission which reported in 1929, a Government Committee set up in 1931 which did not even get the length of reporting, and the reports of the Standing Commission of Museums and Galleries, the third, and last, of which was published as recently

as 1948. So far as Scotland is concerned, there has only emerged *Am Fasgadh*, Miss I. F. Grant's Highland Folk Museum at Kingussie, a purely regional affair, which was on view at the Edinburgh Festival last year. The most productive general move to date, made also in 1948, was the formation of the British Ethnography Committee of the Royal Anthropological Institute, under Professor Fleur (including representatives of Scottish Museums and Universities), which last year presented a detailed "Scheme." This, though concerned primarily with England and the London area, might be applied presumably, *mutatis mutandis*, to Scotland and Ireland. It was reprinted in the form of a pamphlet, and circulated to the Curators of half a dozen selected museums, with a request for the storage of duplicated material, pending the creation of a central museum. Farmers, trade unions, firms dealing in agricultural requirements, local archaeological societies and private individuals, would have to be approached in the first instance for funds sufficient to acquire a "period" mansion, preferably with farm and gardens attached, to a minimum of 200 acres. This might in time be expanded, through samples of the architecture and handicrafts of regional rural and small town areas, to an estate of some 500 to 600 acres. Into it existing natural features, such as an old windmill, a picturesque cottage, or a small stone-built church, might have to be incorporated, or even bodily transferred; the latter an expensive undertaking by comparison with the transport and re-erection of the wooden "period" buildings of Scandinavia. The scheme is a laudable one in theory, but one feels in these days that, even if it were only partially realised, a Government grant, adequate for expansion and maintenance, would not be forthcoming; also that, with the addition of offices, restaurants, car-parks, children's playgrounds, by-passes, shops, cinemas and open-air theatres, the venture might expand ultimately into some outsize Butlin atrocity.

The second paper deals with the problem of secondary education in rural communities, with particular reference to the child who, on completion of that education, is returning to his community, and not proceeding further to compete with his urban counterpart in a University career. The writer stresses the necessity for an experimental, statistical, and

out-of-door, rather than classroom, technique; a greater emphasis at an early stage on the social aspects of certain, mainly scientific, studies, to balance the complete revolution in national methods of agriculture and world economic conditions. Biology, physics, mathematics, history and geography are examined in the light of this suggested new method. Without it, the average pupil would seem in danger of returning to his community loaded with a series of formulæ which have little practical bearing on the job he has to do there. Such subjects as languages, art and religion, as part of the *personal* rather than the *social* life of the youngster, would fall outwith the scope of such revision. Nor must the individual *outward* bent of the *clever* pupil be forgotten in a desire to deal fairly with his community as a whole. In furtherance of this ideal, Dr Davies suggests that what he calls a "rural high school" might be developed from a selected grammar school in a given rural area; that this might be equipped with a farm and take in a limited number of scientifically minded pupils, at the age of thirteen or fourteen, from neighbouring grammar schools. Such a combined course would, at the age of sixteen, develop, for those returning to the land, into a study of agriculture in its widest aspects—stock and crop husbandry, engineering, farm management and accountancy, law and marketing, local government and sociology. "Pure" science at that point would be taken only by boys going on to a graduate course in agriculture. This paper is excellently and suggestively put forward. It deals with a vital subject at its "adolescent" stage, at a time when the whole trend of employment is away from the land, and no premium is placed, officially, on enthusiasm, knowledge, and efficiency.

The ever-pressing question of food production as affecting the world and this country was once more conspicuous. "World Population and World Food Supplies" formed the subject of the Presidential Address by Sir John Russell, O.B.E., F.R.S. As to the extension of food supplies, he mentioned that out of 35,700,000 land acres in the world, 11,000,000 in round figures were classified by experts as "climatically suited" to crop growth, though only 7 to 10 per cent. of this cultivable area was actually in use. He suggested that it was surely possible to bring up the British pre-war average of

one and a half acres per head of the population to a world average per head of five acres.

On the question of soil erosion, he indicated that there might be administrative as well as technical difficulties. Vegetation recasting schemes might well be affected by racial or tribal customs, personal or sectional interests, and problems of political boundaries. He further discussed the intensification of cropping, and possible new uses of science to aid in additional food production.

In the Economic Section, Dr K. G. Fenelon read a paper on "Britain's Food Supplies"; and the problem was also dealt with statistically at the invitation of Unesco, which had asked each member nation to report through a nominee society or association. The Chemistry Section dealt with "Chemistry—and the Food Supply."

The Sectional Presidential Addresses included: (Geology) "Recent Work on the Lower Palæologic Rocks," by Professor W. J. Pugh; (Zoology) "Zoology outside the Laboratory," by Professor A. C. Hardy, F.R.S.; (Geography) "Planning of Land Use," by Professor L. Dudley Stamp, C.B.E.; (Economics) "Economics of To-day and To-morrow," by Professor Sir Alexander Gray, C.B.E.; (Engineering) "Bridging the Gap between Science and Industry," by Sir Arthur Fleming, C.B.E.; (Anthropology and Archæology) "The Place of Archæology in our National Education," by Mr Miles C. Burkitt; (Botany) "The Utilisation of Macroscopic Marine Algæ through the Ages," by Professor Lily Newton; (Education) "Widening the Scope of the Study of Education," by Sir Fred Clarke; (Agriculture) "Farming Science and Education," by Professor N. M. Comber; (Forestry) "The Future of our New Forests," by Professor H. G. Champion, C.I.E.; and (Psychology) "The Nature of the Mind's Factors," by Sir Godfrey Thomson. A collated report, edited by Mr James Maxwell, dealt with "The Psychological Quality of the Population," and in this last-named section short papers discussed such topics as the results of colour blindness tests on London, Liverpool, and Glasgow school-children; the adaptation of machines, particularly aircraft, to the physical and psychological characteristics of their operators; psychological tests for the engagement, placing and promotion of industrial workers; and the efforts of the Child Guidance

Scheme in dealing with various types of youthful maladjustment. A joint inquiry was held by the psychologists and neurologists on "The Relation of Brain to Mind," in which several cases of brain-lesion, reported by Professor Dott, of Edinburgh, were examined in detail.

Other sectional papers worthy of special note included: (Botany) "Algæ and Calcareous Rocks," by Professor Fritsch; (Geology) "Geology in Historical Perspective," by Dr Tomkeieff; "The Chronology of the Ocean Floor," by Dr Hans Pettersson, leader of the Swedish Deep-Sea Expedition; and "The Formation of the Continental Terrace," by Dr Kuenen, of Holland; (Geography) "The Distinction between Peasantry and Small Farming," by Mr Bowen-Jones; and "Early Industrial Settlement in North-East England," by Mr Arthur E. Smailes; (Anthropology and Archæology) "Relative Dating of the Piltown Skull," by Dr K. P. Oakley; (Physiology and Agriculture) "Microbial Digestion in the Alimentary Tract," by Dr D. F. Cuthbertson, of the Rowett Research Institute, Aberdeen, and others; and (Education) "Technology and the Humanities in Further Education," by Professor Aubrey F. Burstall. A symposium contributed by Dr Southgate and other experts, on "Biological Aspects of River Pollution," did *not* include Scottish rivers. Scotland, indeed, appears but seldom in the deliberations of the British Association for 1949.

Finally, the regular conference of the Delegation of Corresponding Societies may be recorded, at which the subject of Dr G. F. Herbert Smith's Presidential Address was "The Preservation of Nature."

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METEOROLOGICAL OBSERVATIONS IN BERWICKSHIRE DURING 1948.

Compiled by the Rev. A. E. SWINTON of Swinton, M.A., F.R.Met.S.

[illegible]

Compiled by the Rev. A. E. SWINTON of Swinton, M.A., F.R.Met.S.

Station.	Height above sea-level.	Hours.	Swinton House.	Dura- tion.
St Abb's Head.	280'	3·36 ·84 ·49 ·35 ·69 1·43 ·74 9·75 2·28 2·77 1·13 2·05	3·36 ·84 ·49 ·35 ·69 1·43 ·74 9·75 2·28 2·77 1·13 2·05	84·4 19·7 6·9 25·6 23·3 43·7 27·5 91·0 28·4 32·4 20·6 23·1
Month.				
January		6·23	7·84	7·15
February		1·15	1·91	2·04
March		·35	·73	·86
April		1·66	1·84	2·12
May		1·44	1·69	2·43
June		3·09	4·51	3·71
July		1·90	1·32	1·41
August		11·55	10·07	7·34
September		1·73	2·32	2·35
October		2·95	3·24	2·69
November		1·85	1·40	1·57
December		1·61	2·55	3·58
Year		35·51	39·42	426·1
Oxendean (Duns).	600'	6·77 1·81 ·54 1·70 1·85 4·65 2·04 10·58 2·88 3·00 1·83 2·38	6·77 1·81 ·54 1·70 1·85 4·65 2·04 10·58 2·88 3·00 1·83 2·38	35·47
Manderston.	353'	7·40 1·60 ·51 1·78 ·94 4·41 2·33 11·33 3·24 2·96 1·98 1·91	7·40 1·60 ·51 1·78 ·94 4·41 2·33 11·33 3·24 2·96 1·98 1·91	37·43
Nisbet House.	290'	Not available.	Not available.	Im- perfect.
Swinton House.	200'	6·58 1·30 ·39 1·83 1·59 3·14 1·22 10·15 2·31 2·59 1·53 1·55	6·58 1·30 ·39 1·83 1·59 3·14 1·22 10·15 2·31 2·59 1·53 1·55	34·18
Lochton.	150'	6·12 1·26 ·60 2·20 1·09 2·86 1·50 9·04 2·23 2·53 1·55 1·37	6·12 1·26 ·60 2·20 1·09 2·86 1·50 9·04 2·23 2·53 1·55 1·37	32·35
Marchmont.	498'	7·08 1·69 ·63 1·96 1·87 3·57 1·56 9·57 2·39 3·14 1·87 2·10	7·08 1·69 ·63 1·96 1·87 3·57 1·56 9·57 2·39 3·14 1·87 2·10	37·43
Cowdenknowes.	300'	6·65 1·75 ·58 2·19 2·12 3·89 1·45 7·31 2·42 2·24 1·72 3·15	6·65 1·75 ·58 2·19 2·12 3·89 1·45 7·31 2·42 2·24 1·72 3·15	35·47
The Roan, Lauder.	550'	7·15 2·04 ·86 2·12 2·43 3·71 1·41 7·34 2·35 2·69 1·57 3·58	7·15 2·04 ·86 2·12 2·43 3·71 1·41 7·34 2·35 2·69 1·57 3·58	37·25

RAINFALL IN BERWICKSHIRE DURING 1949.

Compiled by the Rev. A. E. SWINTON of Swinton, M.A., F.R.Met.S.

Station.	Height above sea-level.	Station.	Dura- tion.	Swinton House.	Hours.
		The Roan, Lauder.	550'		23.2 23.2 12.9 30.0 13.9 21.4 22.4 33.8 29.0 18.5 50.1 74.0 48.8
		Cowdenknowes.	300'		2.08 1.34 1.34 1.54 1.46 1.52 1.01 2.20 2.11 1.02 5.26 3.00 3.21
		Marchmont.	498'		1.95 1.26 1.24 1.59 1.81 1.22 2.24 2.20 1.39 4.48 2.95 3.22
		Lochton.	150'		1.83 1.92 1.35 1.02 1.83 1.15 2.37 2.50 1.49 5.63 3.24 3.04
		Swinton House.	200'		1.18 1.56 1.84 1.05 1.00 1.57 2.12 2.13 1.32 5.14 2.74 2.15
		Manderston.	353'		1.59 1.70 1.45 1.86 1.32 1.65 2.19 1.97 1.25 5.38 3.10 2.43
		Duns Castle.	500'		1.53 1.95 1.94 1.08 1.62 1.37 2.83 2.38 1.60 6.54 3.28 2.81
		Oxendean (Duns).	600'	No records received.	
		Whitchester.	838'		1.50 1.87 1.15 1.05 1.82 1.16 2.33 2.29 1.48 5.45 3.28 2.75
		Tweedhill.	50'		25.13 26.93 25.13 26.93 25.13 26.93 25.13 26.93 25.13 26.93 25.13 26.93
		St Abb's Head.	280'		25.13 26.93 25.13 26.93 25.13 26.93 25.13 26.93 25.13 26.93 25.13 26.93
		Month.			
		January			
		February			
		March			
		April			
		May			
		June			
		July			
		August			
		September			
		October			
		November			
		December			
		Year			

RECEIPTS.

Credit Balance at 30th September 1948	£105 2 9
Subscriptions (including Entrance Fees and Donations)	373 19 6
Sale of Club Badges	6 15 0
Sale of Proceedings	3 0 9

£488 18 0

APPROXIMATE BALANCE SHEET.

LIABILITIES.

Estimated Account for printing <i>Proceedings</i>	£214 11 0
Credit Balances: General Account	£33 14 5
Investment Account	147 5 10
	<u>181 0 3</u>
	<u>£395 11 3</u>

ASSETS.

Cash in Bank: on General Account	£248 5 5
on Investment Account	147 5 10
	<u>£395 11 3</u>
	<u>£395 11 3</u>

20th September 1949.—I have examined the above Financial Statement with the books and received accounts, and find it correct. The Bank Pass-Book has been exhibited to me.

(Signed) WALTER B. BAKER.

PAYMENTS.

<i>Proceedings for 1947</i>		£112 0 9
<i>Printing and Stationery—</i>		
Neill & Co. Ltd.	£55 9 11	
Martin Ltd.	7 7 6	
Berwick Advertiser	1 9 5	
Simpson	3 17 4	68 4 2
<i>Library—</i>		
Rent of room and cleaning (2 years)		2 0 0

Official Expenses—

Secretary (H. H. C.)	£29 0 6
Editing Secretary (A. A. B.)	3 0 0
Treasurer (T. P.)	6 8 9
Treasurer (H. F. M. C.)	3 14 0

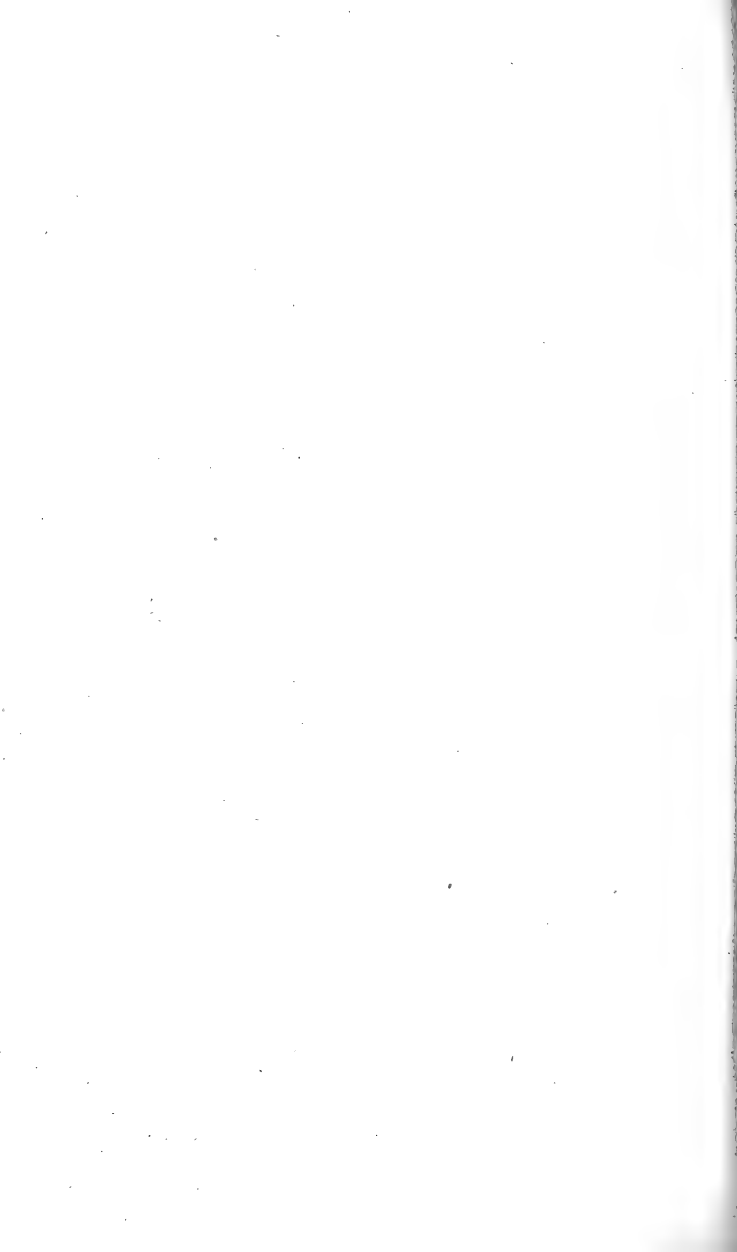
Subscriptions—

Regional Council of British Archaeology	£1 18 5
British Association	2 2 0

Miscellaneous—

Gore, B. N. C. History	£1 10 0
Sir W. de L. Aitchison for Blocks	8 5 6
King's Arms Hotel for Meeting	2 2 0
Cheque Book	0 4 0
Bank Charges (overdraft)	0 2 6

Credit Balance	12 4 0
	<u>248 5 5</u>
	<u>£488 18 0</u>



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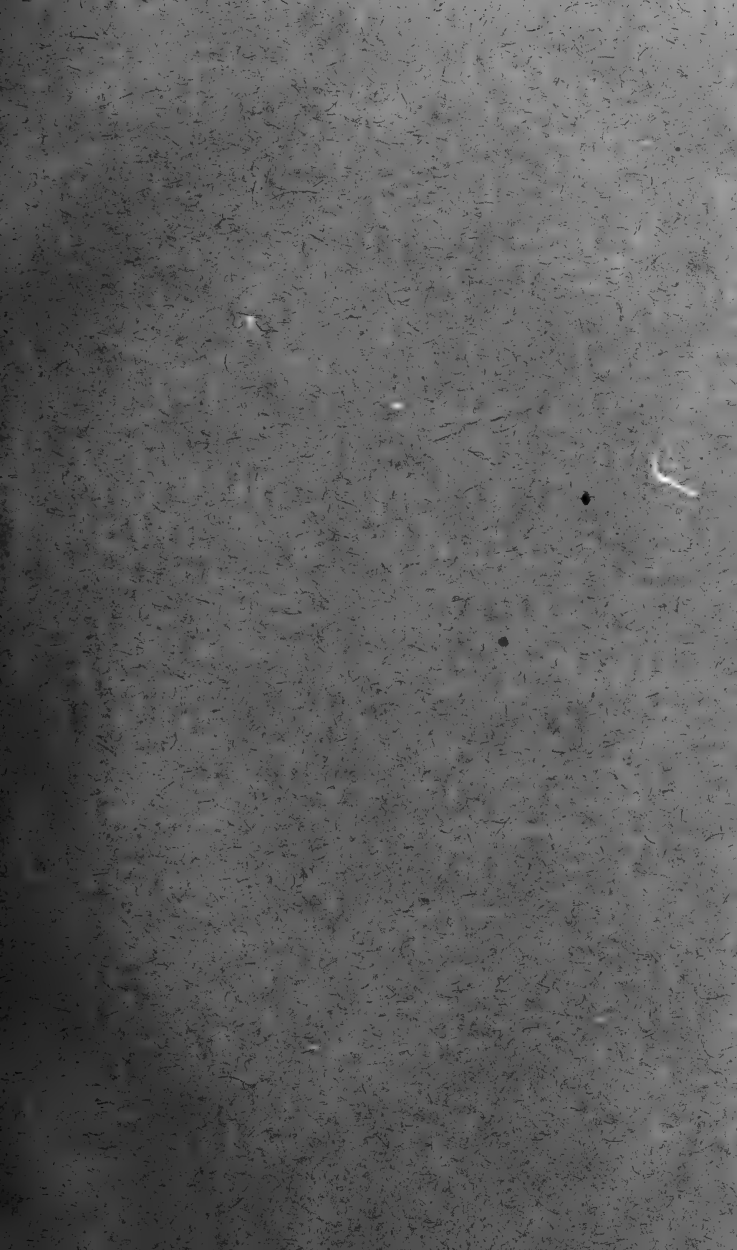
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OF THE
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INSTITUTED SEPTEMBER 22, 1831

"MARE ET TELLUS, ET, QUOD TEGIT OMNIA, CÆLUM"

VOL. XXXII. 1950, 1951, 1952.

EDINBURGH

PRINTED FOR THE CLUB

BY NEILL AND CO. LTD., 212 CAUSEWAYSIDE

1953

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1950

Price to Members (extra copies) 7s. 6d.

Price to Non-Members 10s.

EDINBURGH

PRINTED FOR THE CLUB

BY NEILL AND CO. LTD., 212 CAUSEWAYSIDE

1951

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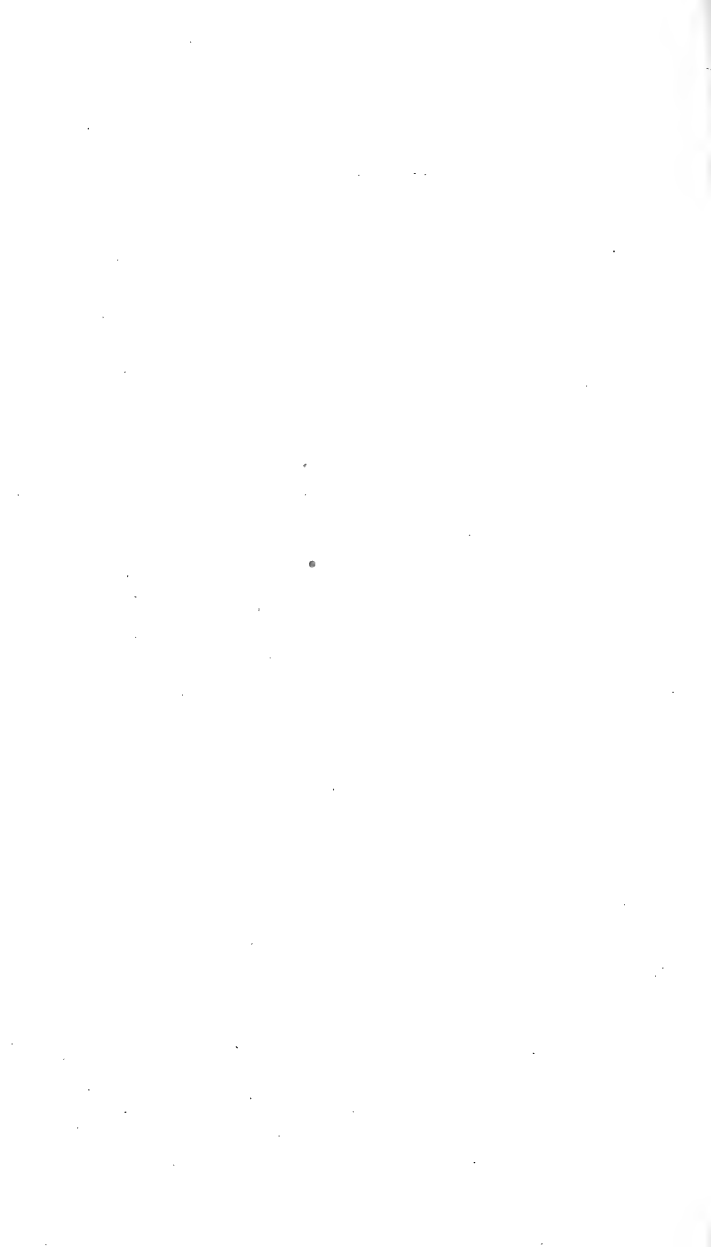
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PROCEEDINGS

OF THE

BERWICKSHIRE NATURALISTS' CLUB

THE FREEMEN OF ALNWICK.

*Address delivered to the Berwickshire Naturalists' Club
at Berwick, 4th October 1950, by R. MIDDLEMAS.*

IN beginning this address it is only fitting that a tribute should be paid to the memory of George Tate, the historian of Alnwick. He was born in May 1805 and died in June 1871. He served as Clerk to the Freeman of Alnwick from 1850 to 1858 and thus had access to the archives of the Freeman. I am now the Clerk. Tate was elected a member of the Berwickshire Naturalists' Club in 1847, became President 1853-54, and served as Honorary Secretary to the Club from 1858 to his death in 1871. He contributed many articles to the *Proceedings* of the Club whilst he was a member.

His *History* of Alnwick is contained in two volumes, the first published in 1866 and the second in 1868.

Mr J. C. Hodgson, a former President and Secretary of this Club, in a paper read to the Newcastle Society of Antiquaries in 1917, stated that the contents of Tate's *History* were logically arranged in chapters, and

that the author displayed literary skill and perspective in presenting his facts in an easy and readable manner, also a considerable power of condensing the copious material which he had accumulated.

I have no wish to sail under false colours, and so far as the early history of the Freemen of Alnwick is concerned I have relied entirely on the matter contained in Tate's *History*.

The earliest existing records of the Freemen are the three charters from the De Vescys, who were the Lords of Alnwick prior to the Percys. These charters were granted to the Burgesses of Alnwick and are preserved among the muniments of the Corporation. The earliest was granted by William De Vescy sometime between 1157 and 1185 and reads as follows:—

“Be it known to all men present and to come seeing or hearing this charter, that I William de Vesci have granted and by this my charter have confirmed to the men, my burgesses of Alnewic, to hold of me and of my heirs, they and their heirs, as freely and quietly as the burgesses of New-Castle hold of the lord the king of England, and also to have common pasture in hayden and in the moor of hayden. These being witnesses, Walter de Bolebec, Roger de Stuteville, John the Sheriff, Rainald de Kynebel, and many others.”

The second charter was made by the second William De Vescy, who was a grandson of the first William De Vescy. The second charter confirmed the first charter, but gave no additional privileges. It is undated, but must have been made between the years 1226 and 1253. The third charter was granted on the Sunday after Michaelmas, in the year 1290, by the third William De Vescy, son of the second William De Vescy; it confirms the former charters and gives additional privileges. At the time of the third charter the Burgesses of Alnwick were a corporate body, for their common seal was attached to the counterpart of

the charter retained by the Lord; this old seal is still in the possession of the Freeman, but has now been replaced by a replica which is of the modern embossing type.

Tradition says that King John gave a charter to Alnwick with the condition that every new burgess should plunge through a pool in Haydon Forest in which the King had been bogged on St Mark's Day. From time immemorial until the year 1853 this extraordinary condition was observed, and every new Freeman had to pass through the pool near Freeman Hill as part of his initiation ceremony before being admitted to the freelage. No part of this charter remains, but tradition is supported by history which records King John's journey northward and that he rested at Alnwick on 24th April 1209.

The burgesses were those who anciently owned or occupied houses, and the corporate name of the burgesses of Alnwick which appears in the De Vescy's charters continued to be used till the middle of the seventeenth century, after which they have always been described as Freeman. The reason for this was that strangers came to buy or occupy houses in the town, and were looked upon with jealousy by the older inhabitants, who had united themselves into a close corporation.

Most of the affairs of the town were conducted by the Freeman acting by four Chamberlains and a Common Council numbering twenty-four.

By a Royal Grant, the date of which is unknown, the Burgesses of Alnwick were granted for ever to hold and keep two fairs annually in the town of Alnwick at two different times of the year, to wit, the first of the said two fairs to begin on the Feast of Saint Philip and Saint James and so to last and continue for eight days thence next following, and the other of the said two fairs to begin on the Feast of Saint Lucy thence next following, and so to last and continue for eight days

thence next following. There was also granted to the Burgesses of Alnwick and their successors for ever a free market in the said Town of Alnwick on Wednesday weekly to hold and to keep for every description of our lieges according to the manner and custom of any of the best and freest market within the County of Northumberland, and further the Burgesses and their successors were granted for ever that they be quit and free from the payment of all kinds of tolls or of other customs used in any market, fair, passage or any other place within the realm of England.

King Henry III gave a grant of a Free Harbour at Alemouth to the Burgesses of Alnwick.

The relations between the Freemen and the Castle authorities were continued in a friendly spirit down to the time when the heiress of the Percys married Sir Hugh Smithson, who was created Earl of Northumberland and afterwards Duke of Northumberland. They were married in 1740. A conflict then took place as to the rights and privileges of the Freemen, which continued for nine years, when a case was set down to be heard before the Lord Chancellor. This, however, never went to trial, as the two parties came to an agreement. Tate states that though the Earl achieved much he did not obtain all he sought; the Corporation was not entirely destroyed, yet its character was changed and reduced to feebleness and insignificance, and obstructive powers were gained which prevented the Town from enjoying the privileges of self-government and retarded for a century the improvement of the moor. Then followed what Tate describes as "the ten years' conflict" touching the constitution of the Corporation and the improvement of the moor. Legal proceedings were taken, but the Bill was ordered by the Court to be dismissed with costs which amounted to £51, 1s. 4d. The attempt to alienate more of the corporate property thus failed.

Fortunatus Dwarris as Commissioner under the Municipal Corporation Act by a Royal Warrant on 29th October 1833 examined into the affairs of the Corporation at a public meeting in the Town Hall. Following on this the news came that Alnwick was placed in Schedule B of the Corporation Reform Bill. Petitions were sent to Parliament praying that Alnwick should not be struck out of the Bill, but these were of no avail. The Duke of Northumberland brought all his powers to bear against them and Alnwick was struck out of the Bill.

It was contended that Alnwick was as much entitled to enjoy the benefits of a reformed corporate government as Morpeth, Berwick and similar Boroughs; the House of Commons took the same view, and when the amended Bill was sent down from the Lords to the Commons, Alnwick was again inserted in the Bill, but it was a second time struck out by the Lords. Such was the influence of the Duke that it was supposed the whole Bill would have been overthrown if Alnwick had been retained in it. The Ministry yielded the point, and Alnwick, the "Little Jonah," was cast into the sea to save the ship. The history of the transaction furnishes a striking illustration of class legislation.

From that day I am pleased to say that the relations between the Freeman and the Castle authorities have been of the most cordial character.

A man could only qualify to become a Freeman if he was the son of a Freeman or if he had served his time for seven years as an apprentice to a Freeman. This still holds good to-day, but the last admission through apprenticeship was in 1891, and for many years now the new Freeman have all been sons of Freeman.

In the years prior to 1853 all the young Freeman who were qualified for admission had to take part in the traditional initiation ceremony. They were marshalled in order, the oldest Freeman's eldest son in front, and

preceded by the Town's Waits playing on violins, were marched through Alnwick. On occasion some of them rode horses, but it is not known whether riding was confined to a chosen few or to those who held special qualifications.

After leaving the town they marched to Freeman Hill in Haydon Forest on Alnwick Moor. The pool which I mentioned before was about one hundred feet long, from six to fifteen feet broad and about three to five feet deep, and was formed by damming up a spring which ran out of the hillside. The bottom of the pool had had turf dykes placed across it, and straw ropes were stretched under the surface of the water to ensure that each aspirant for the freelage should receive a good ducking. The pool was churned up well and made very muddy just before the young Freeman arrived. When they reached Freeman Hill each young Freeman changed into white clothes and a cap adorned with ribbons, and then in order of seniority jumped into one end of the pool and scrambled out at the other. They then changed back into their ordinary clothes, returned to the town and took part in various festivities.

When a young man takes up the freelage he must first be made free of his trade, which means that he must be initiated into the company to which his father belongs. This is a separate ceremony and takes place in each company. When this is done, he presents a certificate showing that he has been made free of his company, which entitles him to be made a Freeman of Alnwick.

The companies in existence now are merchants, cordwainers, skimmers and glovers, tanners, weavers, smiths, wrights, butchers and shoemakers. The fullers, coopers and tailors are now extinct.

In the old days the Freeman employed waits who provided music for the entertainment of the Freeman on all special occasions; they were dressed in livery

and had arm badges embossed with the Arms of Alnwick.

No such ceremony takes place now, and admission to the freelage involves only taking the oath and the payment of fees. These are: Duke's Sergeant, 8d., Duke's Bailiff, 8d., Town Crier, 4d., King's Health, 1s., Borough Clerk, 8d., Borough Fees, 14s. for eldest son, 16s. 6d. for a younger son.

In February 1854 Thomas Bell, having been appointed a valuer under the Enclosure Acts, made an award for the enclosure of Alnwick Moor. He allotted to the Duke of Northumberland 237 acres which he adjudged and declared to be in lieu and in full compensation for the annual rent of 2s. payable by the Freemen to the Duke for the liberty of pasturing their cattle on Aydon Forest, otherwise Alnwick Moor, and in lieu of his right and interest in the soil of the said Moor, and allotted to the Trustees acting on behalf of the Freemen, all the residue of the said Aydon Forest, otherwise Alnwick Moor, containing 2362 acres, 3 roods and 28 perches.

He also awarded that a portion of the inner Moor be set out for 350 allotments of one acre each, and that the Trustees should apportion by ballot an allotment of one acre to each Freeman and Freeman's widow, whose name was put on the Freemen's list. The award also states that the Trustees should make byelaws from time to time as to the regulation, use and management of the allotments.

An Act of Parliament for enlarging the powers of the Corporation of the Borough of Alnwick and for vesting in the Corporation the Forest of Aydon, otherwise Haydon, or Alnwick Moor, in the County of Northumberland, received the Royal Assent on 19th May 1882. This Act vested Alnwick Moor in the Corporation acting by the Council. It provided for the election of the Council, for the revision of the register of Freemen, and the determination of claims of those entitled

to be included in the register, and also provided rules for the election of the Council.

In byelaws made in 1888 it was set out that Freeman and Freeman's widows should not be considered resident under the award unless they had *bona fide* resided in the Parish of Alnwick for six consecutive weeks prior to the revision of the Register of Freeman, and that those on the Register should have an allotment of one acre on the inner Moor and an allotment of three acres on the outer Moor. The right to possess an allotment ceases on the Lady Day next following the decease or non-residence of the allottee, but on the death of a Freeman his widow is entitled, if resident in the Parish, to hold her husband's acres during her widowhood.

At a Special Guild Meeting held in 1913 it was enacted that all land having buildings or other substantial erections thereon should be retained for the benefit of the Freeman and Freeman's widows, and not be put into ballot for young Freeman. At a Special Guild Meeting in 1931 it was decided that the Council in their discretion be empowered out of the surplus revenue of the Moor and other lands estate to pay a dividend to the Freeman and widows of Freeman entered on the Register.

The election of the Council is made by ballot, and the ballot papers are delivered at the residence of each Freeman or widow of a Freeman; in distinction from a Parliamentary or District Council election, the voter has to sign his initials in the space provided opposite the name of the candidate he wishes to vote for. This results every year in certain ballot papers being declared invalid, as they have been marked with a cross and not by the initials of the voter. The voting papers are collected by employees of the Freeman.

The Act also provided that the Council should in each year ending on 25th March expend out of the Corporation funds not less than £500 in payment of

teachers' salaries in the Corporation School. This was altered by the Board of Education Scheme (Alnwick Corporation Payment) Confirmation Act, 1911. The Freemen now have to expend out of the Corporation funds not less than £250 per annum in providing junior and senior exhibitions. The junior exhibitions now take the form of maintenance allowances, and the senior exhibitions provide for maintenance and fees.

Until I took office as President I did not realise the amount of time and trouble expended by our worthy Secretary, Mr Cowan. Members probably do not know that before a country meeting is arranged he goes over all the ground and makes arrangements for their convenience, and I can certainly say that during my year of office these arrangements have met with our unanimous approval. We owe a great debt of gratitude to Mr Cowan.

Reports of Meetings for the Year 1950.

1. THE first meeting this year should count as equal to two normal field meetings, since it covered two days on the ground with a half-day at either end for members to reach the assembly point and to get home again. While the weather was not up to the standard of 1949 it was at least dry during the whole meeting, though with a cold north wind.

On Tuesday, 23rd May, 38 members with seven guests arrived in two buses and one or two cars at Corstopitum, or to give it its modern name, Corbridge. After a picnic lunch in the ruins of this famous Romano-British town, which has been opened out recently, members were taken on a tour of the excavations. Mr J. G. Gillam, Assistant Lecturer in Archæology at Durham University, acted as guide, philosopher and friend, here, and throughout the meeting.

A move was then made to Chollerford, where the excavated remains of a Roman bridge were inspected; thereafter about an hour was spent visiting the Roman fort, including the Regimental and Bath buildings, and the Museum, at Chesters. The last port of call was at Limestone Bank, where a section of the *vallum* and wall-ditch cut through the whinstone was inspected, after which the party dispersed to their respective hotels, three in Hexham, one at Wall and one at Chollerford.

On the second day a portion of the Wall at Brunton was visited. Mr Gillam described the construction, and at a point where there were the remains of a turret, pointed out the exact spot where on the original foundation the full width of ten feet was reduced to seven feet.

A short drive took the party to Carrawburgh, where Coventina's Well and a *mithræum* were viewed. The rest of the forenoon was spent at Chesterholme Fort on the Stanegate, which has been partially excavated. A few miles further west, at Twice Brewed Inn, on the Wall itself, the party had a sit-down lunch. A halt was next made at the roadside opposite Housesteads, which was reached by a short uphill walk across the moor grass.



S.E. CORNER, HOUSESTEADS CAMP.

[To face p. 10.]



WALL AND TURRET EXCAVATED INSIDE
HOUSESTEADS CAMP.



Housesteads is one of the most famous Roman Forts, with, nearby, a Mile Castle on the Wall. Here all the details of the excavations were described and visited.

The last rendezvous was at another Stanegate Fort, a Mile Castle, and a portion of the *vallum* at Cawfields, after which the party drove into Carlisle for the night. Owing to heavy bookings by American and other visitors the Club party had to be distributed over three hotels. All bookings had been made by the Secretary early in the year, so there was no confusion.

On the morning of the third day members inspected the last part of the Wall at Gilsland, a small village on the borders of Northumberland and Cumberland. A section of the Wall was viewed in the Vicarage garden, and here again the reduction to a narrower gauge was clearly visible. Then, after a walk of about a mile, the bridge-abutment by the River Irthing was examined.

The Fort at Birdoswald is, as the crow flies, almost directly across the River Irthing, but there is a *détour* of several miles by road. After inspecting it the party had a welcome warm luncheon by the roadside, provided from a canteen van from Carlisle.

Still on the line of the Wall, a section of turf wall at Apple-tree was visited, as being quite distinct from the stone-built portions of most of the Wall. The journey was then continued to Banks, where Pike Hill Signal Station and, nearby, the remains of a turret on the Wall were inspected.

As this was the last portion of the Wall to be viewed, the President referred to the very successful result of the Club's visit. He thanked Mr Gillam for all he had done and said to show the picture of life in the past. He also thanked the Secretary for the successful arrangements that had been made by him and Sir Walter Aitchison. Hearty votes of thanks to all three were given by the party.

Before they resumed their seats in the buses the Secretary handed to each member and guest a roll which had been presented by Sir Walter as a memento of their visit. This consisted of a reproduction in colour of a section of Hadrian's Wall near Housesteads, "Relic of a Frontier." The original now hangs in Coupland Castle, and was painted by Charles

Oppenheim, R.S.A. It was exhibited in the Royal Academy in 1940.

The last item in the programme (other than an unofficial visit by some members to Lanercost Priory) was a call at the Tullie House Museum in Carlisle, where are housed many valuable relics found on the various sites. Thus ended what was unanimously voted the most successful meeting which members had ever taken part in.

The following new members were admitted: Lady Mary Gilmour, Earlstoun; Mrs J. Kitcat, Coldstream; Mrs D. L. Logan Home, Edrom; and Mr J. R. Wood, Castle Heaton.

2. The second meeting, on Wednesday, 14th June, was also enjoyed in good weather, although the homeward journey took place in a severe thunderstorm.

The Club met the President at Preston Mill, East Lothian, and after lunch the history of the building and the objects of the National Trust for Scotland (which has taken over the mill) were given by Mr G. J. Fleming, a member of both the Club and the Trust. Members were then shown over the mill by the miller, Mr Raeburn. It is in active working order, and samples of its oatmeal were purchased by many of the party. Members then walked through the beautiful flower garden of Mr Burns, adjoining the mill, some of whose specimens are very rare.

A move was then made by road to Whitekirk Church, where members were welcomed by the Rev. Dr Maxwell, who was inducted recently as Minister of the parish. As he explained that he had been in residence only a short time, and had not had the opportunity of becoming fully acquainted with the history and architecture of the church, he thought that the Club was fortunate in having Dr J. S. Richardson, former Chief Inspector of Ancient Monuments, at hand to give the talk.

Having grouped members at the roadside, Dr Richardson gave a brief account of the history of the building and pointed out the main features of its exterior: the highly decorated south porch with its crow-stepped gable and vacant niches, the squat tower, and the transept as restored after the lamentable fire of 1914. He commented on certain features that showed traces of the influence of the Low Countries: the rather unusual design of the east wall, and a sepulchral slab of blue stone, now exposed



WALL-ON-TYNE.

Wall on 10-foot Foundation with Width reduced from 10 feet to 7 feet.

[To face p. 12.]



IRTHING CROSSING, CULVERT AND TOWER.

alongside the porch, but formerly within the church. He expressed the hope that just as the holy well at Restalrig came unexpectedly to light, so here the Well of St Mary, so famous in its day and which had doubtless led to the siting of the church, would be discovered also.

The party then drove to Tynninghame Church, in the grounds of Tynninghame, permission to enter having been kindly given by Lady Binning. The church was described by the Rev. Mr Bulloch of Tranent, and the meeting ended with tea in the Crown Hotel and Linton Lodge, East Linton.

The following new members were admitted: Miss M. M. Henderson, Coldstream; Mr D. M. and Mrs L. R. Robertson, Duns; Mrs C. Smart, Tweedmouth; Lt.-Col. G. F. D. Vernon, Dunbar; and Mr T. J. White, Cockburnspath.

3. The third meeting was held in Northumberland on Thursday, 20th July, when 89 members and guests met the President outside Dunstanburgh Castle. As there is no made road beyond the small fishing village of Craster, most members walked from there to the Castle. After lunch, Dr C. H. Hunter Blair addressed the members from the custodian's office inside the Castle, giving a most interesting account of its history. Thereafter the party was divided into two, one half being taken all round the very extensive buildings by Mr H. L. Honeyman, F.S.A., and the other half by Dr Hunter Blair round the nearer parts.

Returning to their transport, members drove on to Embleton Parish Church, where Mr Honeyman spoke. Dating back to about 1320, the church is dedicated to the Holy Trinity, while the Vicarage, built on to a Pele Tower, is, with Elsdon and Whitton, one of the three existing fortified vicarages in Northumberland. Here also Mr Honeyman described the main features. A visit to the gardens, by permission of the Vicar, Rev. Canon Granlund, concluded the main objectives of the meeting. The day finished with tea at the hotel, where 56 members and guests joined the President.

The following new members were admitted: Mr D. M. Elder, Berwick; Miss P. F. Furness, Ayton; Mrs P. M. Gilchrist, West Coates; Mrs E. Hardy, Ayton; and Mr J. B. Moffat, Spittal.

4. Again "Club Weather" favoured when the fourth meeting took place on Wednesday, 23rd August. As regards the objectives, "to make a kirk *and* a mill of it" might not be inapt.

In Legerwood Church, which is set in a peaceful corner of Berwickshire, the Club heard the Minister of the parish, the Rev. Dr J. W. Hunter, tell the story of a building which goes back to the thirteenth century. Contrary to the forecasts of some who thought that the counter-attractions of the Edinburgh Festival would affect the attendance, there was a record number of 98 members and guests to meet the President.

After lunch in the open, some sitting among the peaceful tombstones, members drove down a winding valley to Ercildoune, to the tweed mill of Messrs Simpson & Fairbairn. This mill has the distinction of being the only tweed mill in Berwickshire, and one of the few in the Borders where the wool is treated in all stages of manufacture into tweed.

In a wool shed which marks the commencement of all operations, they were welcomed by Mr J. Stanley Simpson, who said that while he could not offer the Club anything very old or of the antique type to which they were accustomed, he could at any rate say that there was nothing ruinous or shoddy about their work. Arrangements had been made for the party to be divided into small groups, and to each group was allotted a member of the mill's staff as guide, while each visitor received a copy of the processes involved in the making of tweed. As the whole tour occupied each group for at least an hour and a half, what members saw and heard was very complete. All agreed that the visit to kirk and mill was a most pleasant and unusual combination. The only possible disappointment was that they were unable to take away with them suit or dress lengths of the tweeds.

Tea at the Red Lion, Earlston, finished the day's meeting, when 47 joined the President.

The following new members were admitted: Mrs J. M. Grieve, Earlston; Mrs H. Tegner, Morpeth; and Mr S. O. and Mrs E. J. Williams, Alnmouth.

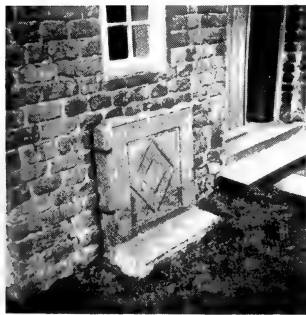
5. The fifth meeting commenced at Etal, in Northumberland, and constituted another record in attendance since the war,



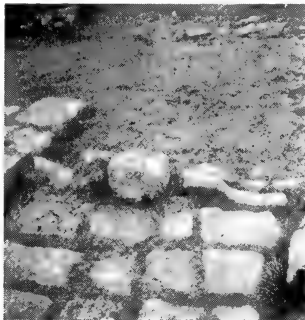
CHESTERHOLME,
North Gateway.



WEST OF HOUSESTEADS,
looking west along Wall.



HOUSESTEADS MUSEUM,
Engraved Stone showing Grooves
worn by Money passed out of
Treasury.



HOUSESTEADS, EAST GATE,
showing Stone worn by
Cartwheels.



ETAL CASTLE.

when 107 members and guests met the President at Etal Castle in one bus of 35, and 30 cars.

Beginning at the entrance gateway of the outer wall, Dr C. H. Hunter Blair related the whole history of the Castle, and then led the party to a closer inspection of the ruins. After lunch in the vicinity of the River Till, members drove to the entrance of Ford Castle, where Mr Honeyman gave a short historical description, though time did not allow of entering the building. One point of interest was that James IV slept here before Flodden. In the Parish Church close by Mr Honeyman described both it and the Castle at greater length.

The next item was a visit to the village school, where the Rector of the church, the Rev. Mr Thomas, spoke about the mural paintings all round the large classroom. These were designed in Ford Castle by Lady Waterford between 1863 and 1883, her models being old and young amongst the villagers. One of the child models, now a retired gamekeeper, still resides in the district.

Thereafter the party drove to Routing Linn, where Mr Honeyman described the cup and ring marks which cover the surface of a massive boulder. Details regarding these can be found in Vol. XXXI, part II, of the *History*, and an individual photograph appears opposite.

The last point of interest was reached after a drive over Barmoor Moor to Doddington Church, where the Rector pointed out the general features and Mr Honeyman the architectural.

The day finished with tea at the Cottage Hotel in Wooler, where the management provided 65 teas.

The following new members were admitted: Mr J. R. Hetherington, Berwick; Major F. Kerr, Reston; Mrs F. E. Robson, Horncliffe; and Mr F. Stott, jun., Berwick.

6. The Annual Business Meeting was held in the King's Arms Hotel, Berwick, on Wednesday, 4th October, when 32 members were present. The President, Mr Robert Middlemas, was in the Chair.

The President read his Presidential Address, taking for his subject, "The Freemen of Alnwick." He showed members two very old charters, one of which had attached to it part of the Great Seal of England; two impressions of the Freemen's

Seal; two Badges of Freeman; and a silk cap worn on the last occasion (1853) on which new Freeman were initiated by passing through the pool on Alnwick Moor.

The President then appointed the Rev. Halbert J. Boyd as his successor, and nominated Sir Carnaby de Marie Haggerston, Bart., as the new Vice-President; thereafter he handed over his badge of office, the Club Flag, to Mr Boyd.

After receiving the Flag from the retiring President, the new President took the Chair, and expressed the thanks of members for a most interesting address. Sir Carnaby also spoke on his appointment.

In the absence of the Secretary, Major Dixon-Johnson read his Report, beginning with apologies for absence from Lord Home and Lt.-Col. Logan Home. The Report was approved by the meeting, coupled with an expression of thanks to Mr Cowan for all the hard work he had put in during the past year, and the hope that he would soon recover from his illness.

Secretary's Report—1950.

At all the field meetings in 1950 "Club Weather" was enjoyed, although it was not always as warm as in 1949. There were generally very good attendances, with a maximum of 107 at the last meeting. At the May meeting on Hadrian's Wall (23rd-25th May) it was cold for the season, but as there was no rain there were no complaints. As this meeting, covering three days, was rather exceptional, the following is a more detailed account than is usually given in such a Report.

Two full days were spent on the Wall itself, besides half-days for members to reach the assembly point and to return home. The meeting was voted by all present—45 members and guests—an outstanding success. It entailed, of course, rather intricate arrangements over many weeks for both transport and hotels, and itineraries for the Wall itself. These were carried through by a member who, unfortunately, was unable to be present and who was to have acted as guide, and by the Secretary. The party was conveyed in two buses, from Earlston and Kelso, and put up at five hotels at the Hexham end and three in Carlisle.

Visits were made to several of the famous Camps, Forts,



SCULPTURED ROCK, ROUTING LINN.



Turrets and Mile Castles on the Wall from Corstopitum in Northumberland to Banks in Cumberland, the details at each being explained in a most instructive and enjoyable manner by Mr J. G. Gillam, Assistant Lecturer in Archæology at Durham University.

At Corstopitum Mr Gillam was introduced by the President, and in a short speech at Banks, Mr Middlemas called for a vote of thanks to Mr Gillam and the Secretary. Before leaving this part of the Wall the Secretary handed to each member of the party a souvenir of their visit, which had been presented by the absent member referred to, "Relic of a Frontier." This is a reproduction in colour of a "View of Hadrian's Wall (West of Housesteads)," the original of which, by Charles Oppenheim, R.S.A., was exhibited in the Royal Academy in 1940. The tour ended with a visit to the Ministry of Works' Museum in Carlisle.

The following members were present:—

Mr R. Middlemas, President; Rev. H. J. Boyd, Vice-President; Mr A. A. Buist, Editing Secretary; Miss Caverhill, Treasurer; Mrs M'Whir, Co-opted Member; and the Secretary. Mr A. Barbour, Duns; Mrs Calder, Marden; Mr Cockburn, Whiteburn; Mr Fleming, Lauder; Mrs Gillon, Abbey St Bathans; Mrs Hardy, Alnwick; Mrs Harrison, Selkirk; Mrs Henderson, Earlston; Miss Milne Home, Paxton; Mr Hood, Cockburnspath; Miss Hope, Earlston; Mrs Howard, Craster; Mrs Hunt, Chirnside; Mr Johnston, Duns; Mrs Knight, Berwick; Mrs and Miss Leadbetter, Jedburgh; Miss Leadbetter, Denholm; Miss Leather, Paxton; Mr Maddan, Kent; Rev. Mr Marshall, Alnwick; Mr Martin, Gattonside; Mrs Middlemas, Alnmouth; Mr. R. J. Middlemas, Alnwick; Colonel Molesworth, Devon; Miss Runciman, Earlston; Mrs Sharpe, Earlston; Mrs Simpson, Edinburgh; Mrs Sprunt, Berwick; Captain Tate, Warkworth; Mrs Murray Threipland, St Boswells. For one day, Mr Milburn, Stow. Also eight guests.

The June meeting in East Lothian was also favoured with warm sunshine, though many members had left home in rain and returned in a severe thunderstorm. The old Meal Mill at Preston was the first objective, and here the history was explained by Mr G. J. Fleming, representing the National Trust for Scotland, which has taken over the mill and is to make extensive repairs. In a visit to Whitekirk Church, Dr J. S.

Richardson gave a description in the absence of the Minister. The second objective of the day was Tynninghame Church, where the Rev. Mr Bulloch of Tranent spoke. Tea at East Linton brought the day to a close.

In July the visit was to Dunstanburgh Castle and Embleton Church, and at both places Dr C. H. Hunter Blair and Mr H. L. Honeyman, Newcastle, spoke. The Club was fortunate in having both these gentlemen again at their September meeting at Etal, Ford Castle, Routing Linn and Doddington, while the Rev. Mr Thomas lectured on the pictures designed by Lady Waterford and painted by her on the walls of Ford School.

The August meeting took place first at Legerwood Church, where the Rev. Dr J. W. Hunter spoke on its history; then after lunch, again in warm sunshine, the party drove down by a winding valley to Earlstoun, to Rhymer's Mill. This is the only tweed mill in Berwickshire, and here they were welcomed by Mr J. Stanley Simpson, part owner. The first inspection made was in a shed where the wool arrives in huge bales, and thereafter the party was divided into groups of a dozen, each led by one of the staff. Members were each handed a copy of the various processes in the manufacture of tweed. In addressing the company, Mr Simpson said that though he was unable to produce anything really ancient, he could assure them that there was nothing in a ruinous condition in the mill. The attendance at this meeting constituted a post-war record, 97 meeting the President at the church. This number, however, was eclipsed at the September meeting with 107 present, though such figures are small by comparison with the pre-1914 era, when an attendance of 150 to 200 was quite usual.

Following on a suggestion at the last General Meeting that a copy of the *History* might be sent to periodicals, such as *Nature*, for their reviews, a trial was made with that paper. The Editor, however, did not even acknowledge receipt, and it must remain uncertain whether any review appeared.

A slight change was made this year in the provision of teas, the booking being made through me. In the last two years caterers had stated that many more members were served than had booked, with consequent difficulties in regard to food supplies. Also, in places where more than one hotel had to be used, there was some confusion as to who went where. The idea

occurred to me during my arrangements for the Wall visit, where members were spread over five hotels. Though it meant a bit of extra work in allocation, it did give me a rough idea of how many members were to be at a meeting.

During the year 24 new members have been admitted, but the Club has suffered several losses by death. Among these are Mrs John Bishop, Berwick, for many years the Club's delegate to the Conferences of the British Association; Miss Margaret Warrender, London, a great-niece of Lady John Scott of Spottiswoode; the Rev. John Ritchie, Gordon, who celebrated his Golden Jubilee last year; and Professor George Watson, M.A., F.S.A.Scot., Oxford, an old friend of the Club, but only comparatively recently admitted to membership. (See also *infra*, p. 54.) The total Membership now stands at 346.

Treasurers' Report—1950.

Mr Purves presented his Report (see *infra*, p. 64) on the financial position of the Club. Income received for the year ending 20th September 1950 amounted to £377, 3s. 9d., which, with the balance brought forward from 1949 of £248, 5s. 5d., made a total of £625, 9s. 2d.

Expenditure (including cost of printing *History* for 1948, £214, 11s. 0d.) amounted to £335, 17s. 7d., leaving a credit balance on General Account of £289, 11s. 7d. Against this sum there was the estimated liability for printing the 1949 *History* of £200. There falls also to be carried to the Balance Sheet a credit balance of £150, 13s. 2d. on Investment Account.

This Report also was approved, and votes of thanks were accorded to both Treasurers. Thereafter Mr Purves expressed appreciation to the Hon. Auditor, Mr P. G. Geggie, for his kind assistance in the auditing of the Club's books and accounts.

The officials of the Club were then re-elected *en bloc*.

Only one application for membership was submitted, that of Miss I. B. Patrick, Berwick-on-Tweed, and this was approved.

As no suggestions were put forward by the meeting as to a Club representative at the 1951 Conference of the British Association, this appointment was referred to the Council.

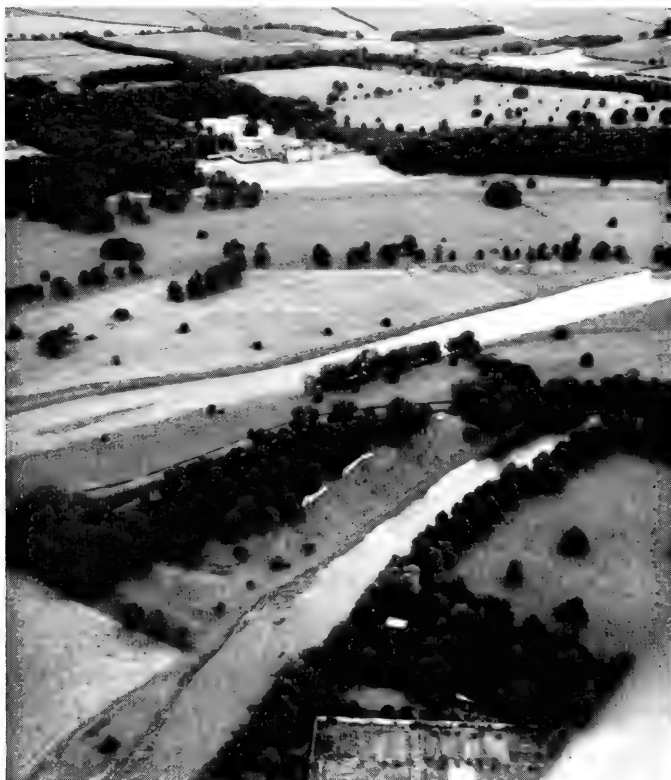
It was proposed, seconded and agreed that the subscription should remain as at present.

Mr Buist tried to encourage members to produce more for the *History*, pointing out that the Club had a duty to make itself known to the outside world, and especially to other clubs and societies, through this medium.

Captain J. C. Collingwood thought it would be a good idea if each member undertook to get another to join.

The meeting closed with votes of thanks to Mr Honeyman for his various "talks" to the Club at field meetings, and to the President as Chairman.





*Cambridge University Collection,
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[Photo: J. K. St Joseph.]

SITE OF ROXBURGH CASTLE, BETWEEN TWEED
AND TEVIOT.

Floors Castle in middle distance.

To face p. 21.]

THE WARDENS OF ROXBURGH CASTLE.¹

By C. H. HUNTER BLAIR, M.A., D.Litt., F.S.A.

INTRODUCTION.

THE scanty ruins of Roxburgh Castle—"Boosom'd high in tufted trees"—stand on a ridge of high land between Tweed and Teviot, a short distance above their meeting at Kelso (Plate VIII). The ridge rises steeply on the south above the turbulent waters of Teviot; on the north it falls as steeply to the banks of the broad and more placid Tweed; on the east a gradual ascent leads to the remains of the great gateway; on the west a deep ditch cuts off the castle hill from the neighbouring high ground. No record tells when a "castle" was first built upon this commanding site, but it would seem probable that it was in the early part of the twelfth century. In the year 1107 Eadgar King of Scots (1097-1107) gave the lordship of Cumbria and of the Lothians south of the Lammermoors to his younger brother, Earl David. It seems probable that shortly thereafter a "castle" would be built upon this natural fortress. It was a central and convenient place from which to watch the March towards England and to administer the lands of southern Lothian. The place-name is first mentioned in a charter of Earl David dating in the early part of the twelfth century,² before 1124. A dwelling-place of some importance must have been built before 1125 when King David I was visited there by the papal legate Cardinal John of Crema³ (*Cremensis*). The castle (*turris*) is first named in 1134 when Malcolm, son of Macheth, was there imprisoned.⁴ The nature of this early castle can only be conjectured; probably the summit of the height would be surrounded by a palisaded mound, whilst a deep and wide ditch, with a quick-set hedge,

¹ This name is used to include the various titles used in the records—keeper, constable, warden, guardian, governor, captain or sheriff.

² LK, I, 3.

³ CM, 68.

⁴ CM, 69, *capitur et in arcta ponitur in turre Rokesburgh custodia.*

like a *chevaux de frise*, on the counterscarp, would surround the base upon at least the west, north and east sides. The earliest buildings within these defences would be of wood, with a tower-house surrounded by a ditch forming an inner bailey, the quarters for garrison and servants being in an outer bailey, probably at the east end of the site. By the end of the twelfth century, or shortly thereafter, it may be assumed that stone walls, with stone gatehouse and tower, a hall, and the usual domestic buildings of a great castle, would have replaced the early earthworks.

Roxburgh became a favourite residence of the Kings of Scots from David I to Alexander III ⁵ (1124–1286). The many royal charters, dated thence, witness that there much of the administrative work of the Kingdom was done. It was indeed a royal palace, intimately joined to the family life of these sovereigns. Royal marriage contracts ⁶ were signed there, marriages celebrated,⁷ and royal children born and baptised ⁸ in the chapel of St John the Evangelist, within its walls. There Scottish kings, surrounded by their courts, received visits of state from other sovereigns,⁹ and foreign ambassadors ¹⁰ were welcomed.



ST ANDREW.

It was in the castle that King Alexander II, on 30th May 1223, knighted John le Scot, Earl of Huntingdon, son of Earl David, together with many others of his peers,¹¹ followed, doubtless, by the pomp and circumstance of the high ceremonial of the tournament.



SCOTLAND.

“Where throngs of Knights and Barons bold,
In weeds of Peace high triumphs hold,
With store of Ladies, whose bright eies,
Rain influence, and judge the prise.”

The object of this paper, however, is not to follow in detail the history of the castle; it is rather an attempt to give the names,

⁵ From 1174 to 1189 it was in English hands.

⁶ *Foedera*, p. 595.

⁷ CM, 149.

⁸ *Ibid.*, 154.

⁹ *Ibid.*, 181.

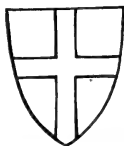
¹⁰ *Ibid.*, 68, 140.

¹¹ Alexander rex Scottorum Johannem Scotum comitem de Huntedune . . . filium, David comitis, et plures nobiles viros armis militaribus induit (CM, 141).

with short biographies, of the men who were its governors from 1291 to 1460, during which period it was with short intervals ¹² a possession of the English crown. Before 1291 there was also a period of fifteen years when Roxburgh belonged to the English. By the treaty of Falaise (8th December 1174) it and other important castles were ceded by William the Lion to Henry II of England as security for the execution of that treaty. Roxburgh and the others were restored to William by Richard Coeur de Lion on 5th December 1189. The earlier part of this list contains the names, so far as they have been found, of the sheriffs, whether English or Scottish, who presumably were in charge of Roxburgh Castle before 1291. These sheriffs are not definitely said to have had this charge, but it was customary for the royal castles of a sheriffdom to be an appanage of the shrievalty. In 1220 "constables" of the castle are first mentioned, officers ¹³ who would be responsible to the sheriff for its immediate control and defence. It was the Scottish sheriff Sir William Soules who, on 13th June 1291, was ordered by Edward I to give up "his charge" of Roxburgh Castle to Sir William Grandison.¹⁴ It was earlier in that year, at Norham, that Edward had asserted his paramountcy over Scotland and so ended the peace of a hundred years (1174-1291) and rang in the centuries of war between the two nations. Roxburgh then became an English fortress, the gathering place of England's armies arrayed for the conquest of Scotland. They mustered at Newcastle upon Tyne and marched north by the well-trodden highway that went direct between the two places,¹⁵ the high road which, nearly a century later, was to be the dividing line between the East and Middle Marches towards Scotland in



EDWARD I.



ST GEORGE.



ENGLAND.

¹² A.D. 1313 to 1334 and from 1342 to 1346.

¹³ *Post*, p. 29.

¹⁴ *Post*, p. 31.

¹⁵ *Altam viam que se extendit directe de villa Novi Castri super Tynam usque Rokesburgh* (RS, II, 41).

Northumberland.¹⁶ After the cession of the castle to Edward it was given in charge, as wardens, to some of the ablest knights of Edward and his successors who, with strong garrisons, held it with difficulty, twice without success, against many fierce Scottish attacks. It was a dangerous ward, as Sir William le Latimer found when, writing in 1302 to the Chancellor of England, he says, "we are in daily peril of our lives."¹⁷ The strength of the garrison varied at different times, but it was always a comparatively large one. It consisted normally of a body of heavily armed men-at-arms (including knights), of hobelars or light horsemen, ready at need to make forays, of horse and foot archers, crossbowmen, watchmen for the walls and porters for the gates. Besides these fighting men were masons, carpenters, smiths and other tradesmen for the upkeep of the fabric of the building upon which, as will be seen in the sequel, large sums of money were spent.¹⁸ In the late fourteenth and in the fifteenth centuries Roxburgh Castle became an appanage of the West March of England. Ralph Lord Grey-stoke was, in 1380, appointed one of the wardens of that March "with the keeping of Roxburgh Castle."¹⁹ In 1400, Richard Lord Grey of Codnor and Sir Stephen le Scrope, banneret, whilst wardens of that March, undertook as part of their duty to "keep²⁰ the castle of Roxburgh." In the first days of August 1460 King James II laid siege to the castle with an army equipped with the new artillery; whilst he watched the firing of one of these large hooped cannon, it burst and a flying fragment killed him. The place was captured a few days later (8th August), but at this heavy price. The Scots completely destroyed the castle, and though it was partly restored once, and again in later years, it never regained its earlier importance, and now only some earthen mounds and ditches and fragments of masonry remain to tell of the palace of the Kings of Scots, and of the once great English fortress.

¹⁶ *Altam viam que se extendit directe de villa Novi Castri super Tynam usque Rokesburgh* (RS, II, 41).

¹⁷ CDS, III, No. 341.

¹⁸ In 1335-37 by Sir Wm. Felton (*post*, p. 35). In 1419-20 by Sir John Bertram (*post*, p. 43). In the years 1445-59 the very large sum of nearly £8000 was spent upon it (CDS, IV, 1185 and later).

¹⁹ CDS, IV, No. 315.

²⁰ *Ibid.*, Nos. 567-568.

MARCHMONT.

The Scottish chronicler John of Fordun (d. c. 1384), writing in the later half of the fourteenth century, calls Roxburgh Castle *Marchemond*. The relevant passages are: *Turstanus Eboracensis archiepiscopus ad castrum Marchemond videlicet Roxburgh veniens . . .* (*Chron. Gent. Scot.*, ed. Skene, Bk. iv, ch. xxxii).

Malcolm Macheth . . . tandem capitur, et ab eodem rege David in turre castri de Marchemond arta custodia truciadatur (*Gesta Ann*, ch. i, p. 254, ed. Skene).

Donald, son of Malcolm Macheth . . . in eodem turre de Marchemond cum patre suo incarceratum (*ibid.*, p. 255).



It will be noticed that Fordun does not say that Marchemond was an *early* name for Roxburgh Castle; he simply calls it so without qualification. The quotations given above obviously derive from the accounts of the same incidents given in the *Chronicle of Melrose*, but there the castle is called *Rokesburgh* (*Chronica de Mailros*, Bannatyne ed., pp. 69, 70, 76). The later chroniclers, Hector Boece (c. 1465–1536) and John Bellenden (1533–87), following Fordun, call the place *Marchemond*. William Camden, in his *Britannia* (trs. Holland ed., 1637, *Scotia*, p. 10), calls it *Marchidun*. “Rosburg sheweth itselfe, called also Roxburg, and in old time Marchidun because it was a towne in the Marches.” *Origines Parochiales Scotie* says, more cautiously, “said to have been called of old by the name of Marchemond or Marchidun.” On pages 450–52 of this publication fifty-three variants of the name Roxburgh, taken from original sources from A.D. 1109 to 1696, are given, but the only references given for *Marchemond* are to Fordun, or to such as Boece and Bellenden who were probably dependent on him. Camden is the earliest authority to allege that that name was an ancient one. It is a fine romantic name and describes the site well, but it is not “old,” and seems to have been an invention of Fordun.

The name, though not used officially, was evidently familiar in the fifteenth century; in the year 1482 King James III

called one of his heralds *Marchmont*, probably as a memorial of his father's tragic death and the subsequent capture and destruction of the castle of Roxburgh. He also placed the name on a scroll above the royal shield of Scotland, ensigned by a coronet upon his Privy Seal, as shown on the previous page, from an engraving on p. iv of the Bannatyne edition of the *Liber S. Marie de Calchou*.

REFERENCES AND ABBREVIATIONS.

- CDS *Calendar of Documents relating to Scotland*, A.D. 1108–1509. Four volumes, ed. by Joseph Bain, 1881–88.
- CM *Chronica de Mailros*. Bannatyne Club, 1835.
- CP *The Complete Peerage*. New ed., vols. i–xi.
- CAL *Caledonia*, by George Chalmers. New ed., vol. iii, 1888.
- Ex.R *The Exchequer Rolls of Scotland*, A.D. 1264–1379. Two volumes, ed. by George Burnett, 1878.
- HS *Publications of the Harleian Society*, vols. 80–84.
- LM *Liber Sanctae Marie de Melros*. Bannatyne Club.
- LK *Liber S. Marie de Calchou*. Bannatyne Club.
- LS *Catalogue of Ancient Scottish Seals*, by Henry Laing. Two vols. Edinburgh, 1850 and 1866.
- NCH *A History of Northumberland*. Fifteen volumes, 1890–1940.
- OPS *Origines Parochiales Scotiae*, vol. i. Bannatyne Club, 1850.
- PR *Calendars of the Patent Rolls*.
- RS *Rotuli Scocie*, two vols. fo., A.D. 1291–1516. London, 1814–19.
- Scottish Kings*, 1005–1625, by Sir Archibald H. Dunbar.
- The Mediæval Castle in Scotland*, by W. Mackay Mackenzie.
- The History and Antiquities of Roxburghshire*, by Alex. Jeffrey. Four volumes, 1857.
- Early Sources of Scottish History*, by Alan Orr Anderson. Vol. ii. Edinburgh, 1922.

ARMORIAL REFERENCES.

- AG *Armorial de Gelre*, Scottish Arms, vol. i, by R. R. Stoddart. Edinburgh, 1881.
- C *The Siege of Caerlaverock*, by N. H. Nicholas, 1828, and an edition by Thos. Wright, 1864.
- F *The Falkirk Roll of Arms*, A.D. 1298. *Scotland in 1298*, by Henry Gough, 1888.
- J *Jenyn's Ordinary of Arms*, ed. by J. Greenstreet, in Welford's *Antiquarian*.
Jenyn's Roll of Arms, ed. by J. Greenstreet, in *Notes and Queries*, 1881.
- N *Nativity Roll*, ed. I. Reliquary, 1875.
- NOB *Nobility Rolls of Arms*. Notes and Queries, 1876-77.
- P *Parliamentary Roll*. The Genealogist, vols. xi and xii.
- POW *Powell Roll of Arms*, ed. by J. Greenstreet.
- S *Scottish Arms*, 1370-1678, by R. R. Stoddart. Vol. i, 1881.
- W *A Roll of Arms of Richard II*, ed. by T. Willement, 1834.

LIST OF WARDENS.¹

- c. 1124. JOHN, SON OF ORM, sheriff. (Cal. III, 90, n. ed.)
 Owner of Crailing. Occurs as witness to charters of David I.
- c. 1127. GERVASE RIDELL. (*Ibid.*)
 Styled *vicecomes de Rokesburch* in a charter of David I (Dal. Coll., No. 348).
 He was a witness with Henry, son of David, to a charter of King David's dated at Roxburgh; he was not then sheriff (LK, p. 297).
- c. 1160. HERBERT OF MACCUSWELL (MAXWELL), sheriff.
 (LK, p. 136.)
 He witnessed documents as sheriff, granted the church of M. to Kelso Abbey, in c. 1190 he made a recognisance in Yorks. and accounted for 100/-, d. c. 1200, his s. and h. was John (LK, CDS, I).

¹ Sheriffs and constables are also included.

THE CASTLE WAS GIVEN UP TO HENRY II BY KING
WILLIAM ON 8TH DECEMBER 1174 (CDS, I, 139).

1177. Sir WILLIAM STUTEVILLE.



Barry argent and gules (J) (as borne later).

S. and h. of Robert S. mar. Bertha, niece of Ranulf Glanville, keeper of Topcliffe Castle 1174, of Roxburgh 1177, sheriff of Northumberland, Cumberland and Westmorland 1200, of Yorks. 1201, d. 1203.

THE CASTLE RESTORED TO WILLIAM BY RICHARD I,
5TH DECEMBER 1189 (CDS, I, 196).

c. 1199. WALTER CORBET, sheriff. (Reg. Paisley, 254.)



Three corbies (? or and sable).¹

In 1166 he witnessed a charter of King William, a hostage for the performance of a convention between William I and Henry II, 1174, pays 20 mks. not to be accused of complicity with the King's (Henry) enemies, gave the church of Makeston (Maxton) to Kelso Abbey, his dau. and h. mar.

second s. of Patrick I, Earl of Dunbar (CK, CDS, NCH).

c. 1207-26. Sir JOHN OF MACCUSWELL (MAXWELL), sheriff.²
(LK, p. 172.)



Argent a saltire sable. (S.)

He is called s. of Herbert M. (LK, p. 176) and in A.D. 1222 is styled *chamberlain* (LK, 309). In July 1215 he was one of the ambassadors sent by Alex. II to John, in 1220 is named amongst the barons of Scotland, in 1221 witness to a grant of dower by Alex. II to his wife Joan of England (LK, CDS).

¹ He probably did not bear an armorial shield. That here given is carved upon the tombstone of his descendant, Sir Walter Corbet of Makeston, and of Lanton and Newton in Northumberland (N/C, *Proceedings* iii, p. 95).

² John of Maccuswell is said in Cal. III, n. ed., p. 96, to have been sheriff c. 1189 ref. Charter 139 CK. He is not named in that charter, nor can I find any reference to him as sheriff at that date. Bernard of Haudene is also said to have been sheriff before 1249. He is not named in CK, 49 ref. given, nor can I find him called sheriff in any Kelso charter.

- c. 1220. Sir RALPH OF CHAMPAINE (DE CAMPANIA), constable. (LM, 250.)



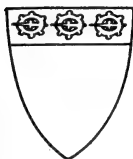
Azure three bars varygules (P) (as borne later).
(One bar has been omitted in the block.)

Nothing found except that he occurs as a witness to a charter of Alan, constable of Scotland (LK). He also witnessed, as constable, a deed of Robert de Vere, Earl of Oxford (1214–21) (LM, I, 229).

- c. 1237. ADAM OF BAGGAT, sheriff.

In a chapter of about this date he is called sheriff of Roxburgh. In a charter dated 1235 he appears amongst the witnesses as a burgess of Roxburgh (CK, pp. 285 and 321).

- c. 1241–49. Sir ALEXANDER STRIVELIN, constable. (LK, 194.)



(Argent) on a chief (gules) three buckles (or)
(LS).

(Seal of Sir John S. of 1296.)

In 1244 he was a juror for Walter Earl of Buchan.

1246. Sir NICHOLAS SOULES, sheriff. (LK, 127.)



Barry or six argent and sable (AC).

In 1244 Henry III restored to him and his wife Annora their lands in Stamfordham, Northumberland, in 1246 as sheriff of Roxburgh he with others perambulated the March between England and Scotland in a dispute between Bernard of Haudene and the canons of Carham, 1248 his lands in

Northumberland were taken by the sheriff and in the same year he complained of injury done to him against March law, c. 1244 made oath that he had not aided nor abetted trespass upon the King of England's land (CDS, 1).

c. 1250. Sir WILLIAM OF HAUDENE, constable. (LM, 306.)



. . . a saltire . . . between four molets (LS).

Haudene lies to the south-west of Carham. In 1246 Bernard of Haudene had a dispute with the canons of Carham as to their boundaries, and a commission was appointed to delimit the Border line there. In 1244 Sir William was juror for Walter Earl of Buchan (CDS, 1).

c. 1262. Sir WILLIAM FERINDRITH, constable. (LM, 294.)
Nothing more found.

1265-66. Sir HUGH ABERNETHY, sheriff.



(Argent) a lion rampant (gules) over all a baston (sable) (S).

The above charges appear on a seal of Laurence Abernethy of 1320 date. Sir Hugh A. was lord of Rule, forester of Selkirk and sheriff of Roxburgh (Ex.R.).

1285. Sir HUGH PERESBY, sheriff. (LK, 180.)
No arms found. Justice errant in Tyndale in 1279 (CDS, III).

1285. ALEXANDER OF MAXTON, constable. (LK, 180.)



Or a chevron gules between three crosses crosslet fitchy sable.

Did homage to Edward I in 1296, constable again in 1290.

c. 1285. ROBERT OF COKEBURN, constable. (LM, 260.)



Argent three cocks gules.

Here named constable and Sir Hugh P. sheriff.

c. 1289-91. Sir WILLIAM SOULES, sheriff. (CDS.)



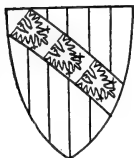
Barry argent and sable (Seal and AG).

Envoy from Alex. to Ed. I Feb.-May 1278, justiciar of Lothian 1285, butler of Scot. 1285, sheriff of Roxburgh 1289-91, of Inverness 1292, Ed. I takes him and his men under protection 1304, held lands in Northumberland and in Jedburgh Forest. On 13th June 1291 ordered by Edward I

to give up his charge of Roxburgh Castle to Sir William Grandison (CDS, RS, HS).

THE CASTLE WAS SURRENDERED TO EDWARD I,
13TH JUNE 1291.

1291. Sir WILLIAM GRANDISON.



Paly argent and azure on a bend gules three eagles displayed or (F).

On 13th June William of Soules, then sheriff of Roxburgh, was ordered to give up the castle to him. He was son of the Seigneur de Granson, on the Lake of Neufchâtel, and brother of Otes of Grandison; both he and his brother were much employed in the

service of Edward I, and though he was present at Falkirk in 1298 this is the only employment he held in Scotland. He was summd. to parliament 1298-1325, in which latter year he died (RS, I; CDS, II; CP, HS).

1291-92. Sir BRIAN FITZ ALAN.



Barry or and gules (F).

On 4th August 1291 appointed keeper of the castles of Jedburgh and Roxburgh, on 18th August 1292 ordered to surrender them to John Baliol. S. and h. of Alan fitz Brian of Bedale, in Wales 1277 and 1287, on pilgrimage 1285, employed much in Scotland and on the Marches in Northumberland,

keeper of Scotland 1297, fought at Falkirk 1298, summd. to parl. 1295-1305, d. 1306, bur. Bedale church, where his fine effigy yet remains (RS, I; CDS, II; CP, HS).

1292-96. In 1292 Sir Brian, by Edward's orders, gave up the castle to John of Baliol. In 1295 it was returned to Edward, who undertook to surrender it at end of the French war. In 1296 James the Steward swore fealty to Edward and gave up the castle to him (RS. I).

1296. WALTER TONKE.

Arms unknown. On 14th May the castle, town and sheriffdom of Roxburgh were committed to him. He accounted for £56, 15. 0 of its issues for the year 1295-96. He has not been traced; he was not a knight, but probably a clerk of the king's household (RS, I; CDS, II).

1296-1305. Sir ROBERT HASTANG.



Azure a chief gules and a lion rampant or (P).

His seal to *Barons' Letter* shows a double-tailed lion apparently debased by a bar; it is possible that this is a rough way of showing the chief. Appointed keeper of the town and castle of R. and sheriff of the county 8th Sept. 1296, styled late constable Oct. 1305. 10th Nov. 1300 called captain, guardian and sheriff of the castle, town and county to serve until Pentecost next with 20 men-at-arms and 100 foot; Feb. 1302 with 10 men-at-arms and foot as before, garrison of town 180 foot. There was also a carpenter, smith, mason, bowser and watchman kept in the castle. In 1306 thanked for services as Marshal of Berwick, 1308 had grants of land in Scot. and grant for life of the town of Kingston upon Hull, 1311-16 on King's service in Scot., 1325 broken by age and infirmity gave up Hull, d. before April 1336. He was of La Desirée and Badenhall, Staffs, served in Ireland 1289, summd. parl. 1311 (RS, I; CDS, II; CP, HS).

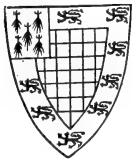
1302. Sir WILLIAM LE LATIMER.



Gules a cross patonce or (F).

He appears to have been at Roxburgh with Sir Robert Hastang in 1302-3, on 1st September 1302 he is ordered to ride with 20 men-at-arms when necessary "in divers parts of Scotland," he had then 38 men-at-arms in his force at Roxburgh, whilst Sir Robert Hastang for the castle and sheriffdom had 10 men-at-arms and 40 foot; Jan. 1303 he asks for protection for his vallet at Roxburgh in his company "where we are in daily peril of our lives." He was called "le père" or "the elder" to distinguish him from his son. In 1270-74, with Prince Edward in Holy Land, 1275 on Pilgrimage to Santiago, Scottish wars 1291-1303, in Gascony 1294-97. At Falkirk 1298, captain for King in Marches 1299, keeper of Berwick 1300, at Roxburgh 1302-3, summd. to parl. 1299-1304, d. 5th Dec. 1304 (RS, CDS, CP).

1305. JOHN OF BRITTANY.



Chessy or and azure a canton ermine and a border of England (C).

Son of John II Earl of Richmond, b. 1266, cr. Earl of Richmond 15th Oct. 1306, constable of Roxburgh and Jedburgh Castles 26th Oct. 1305, Lieu. and guardian of Scotland 1305 and 1307, Lord Ordainer 1310, ambassador to France 1325-27, d. 7th Jan. 1334 (CP, HS, OPS).

1306-1310. Sir ROBERT MAULEY.



Or on a bend sable three eagles displayed argent (P).

Constable of castle 12th July 1306, sheriff Jan. 1307, when ordered to repair and victual the castle, thanked by the king for his good service, ordered to hand over the castle to Sir Henry Beaumont Feb. 1310, styled late constable March 1310. He was a younger bro. of Peter Lord Mauley; sergeant serving with Henry Earl of Lincoln in 1277, serving in Scot. 1291, granted Bolsover Castle and Horeston Castle the latter freely until he had been repaid the wages of himself and men and for horses of kts. and men-at-arms lost at Roxburgh 1312, constable of High Peak manor, castle and chase 1319, as commisr. of array to muster his men of Notts. and Staffs. at York against Scots 1323, d. 1331 (CDS, II and III; HS).

1310-11. Sir HENRY BEAUMONT.



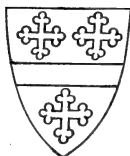
Azure fleuretty a lion rampant or (a baston gobony arg. and gu.) (N).

He fought at Falkirk 1298, where his horse, a brown bay worth 60 mks., was killed, serving in Scot. 1301, granted barony of Crail 1306, jt. warden of Scotland between Forth and Berwick Feb. 1310, 24th March 1310 granted castle and county of Roxburgh for life, Ed. II was at Roxburgh 23rd-28th Sept. 1310, in garrison at Perth with 60 men-at-arms 1310, constable of Scot. In right of his wife Alice Countess of Buchan, receives her lands 12th Dec. 1312, received manor of Sprouston, Roxburghs. 1311, granted lordship of Isle of Man 1310. He was a ygr. s. of Louis de Brienne and grands. of John de Brienne King of Jerusalem and Emperor of Constantinople, and a cousin of Ed. II from whom he recd. grants of many manors and castles. He fought at Boroughbridge on the king's side 1322, constable of England, 1322, constable of the army 1338, justiciar of Scotland 1338, d. 10th March 1340 (CDS, II and III; CP, HS).

1310-13. Sir WILLIAM FILINGE.

Arms are unknown. His origin and family are also unknown, he was a kt. Aug. 1311, and constable of the castle in March 1310 (probably under Sir Henry Beaumont) when £315 was ordered to be paid to him and his garrison of 139 men, his horse valued at Berwick, 1312, was a destrier (*dextrarius*), as sheriff he accounts for the issues of the county 1311-12, received 200 mks. as payment for self and garrison the numbers and names many of them are given in CDS, III, p. 406. Sept. 1313, the mayor and bailiffs of Newcastle upon Tyne and the customers of Hartlepool were ordered to pay him £100 and £315 respectively for arrears of his pay as constable of Rox. (CDS, III).

1312. Sir IVES ALDEBURGH.



Azure a fess argent between three crosses crosslet or (Nob.).

As blasoned for his son William whose brass at Aldburgh shows the fess *danced*. His name is from Aldburgh in Richmondshire, when in 1298 Sir Robert Hastang was making sallies from Roxburgh, Ives of Ald. was a "vallet" of his garrison and lost two horses, a dark bay and a grey. Later in that year he is called kt., sheriff of the three Lothians 1305, in garrison at Roxburgh under Sir Ralph Monthermer king's lieu. in Scot. 1309-11, warden of town of Roxburgh 1312, justice in eyre 1314, for the munition of the castle was paid £376-6-8d, for himself and garrison 1316, appointed, with the abbot of Rievaulx, to treat for peace with Sir Robert Bruce 1326, suc. by his son William who had exemplification of a charter of his father from Edward Baliol of lands at Broxmouth in 1347 (RS, I; CDS, III; HS).

The castle was captured by the Scots under Sir James Douglas, 27th February 1313, and remained in Scottish hands until 12th June 1334, when Edward Baliol King of Scots granted it to Edward III (CDS, III, 894 and 1127).

1313. NICOLL FOULLER appointed constable of castle after its capture by Sir James Douglas—nothing more has been found about him. Bernard of Haudene was his lieutenant (OPS).

1323. ADAM RUFF appears as constable in this year—nothing further found about him (OPS).

1329. Sir ROBERT PEEBLES, chamberlain. Accounts for £20 "for the ward of the castle of Roxburgh" (OPS, 481).

Roxburgh Castle granted to Edward III by a charter of Edward Baliol King of Scots dated at Newcastle upon Tyne 12th June 1334.

1334. Sir GEOFFREY MOUBRAY.



Gules a lion rampant argent and a label of five points argent (LS seal of 1292).

He was appointed warden during pleasure when the castle was delivered to Ed. III by Edward Baliol. He was probably a son of that Sir Geoffrey M. who sealed as above in 1292. In Oct. 1334 he had protection as a kt. of Scot. going to Ed. III in England with his retinue, Oct. 1335 pardoned for all offences,

1336 called late husband of Isabel Countess of Mar, divorced by her before Easter 1336 (RS, CDS).

In 1334 David II appointed Sir WILLIAM SETON sheriff of Roxburgh.

1335-42. Sir WILLIAM FELTON.



Gules two lions passant silver within the Scottish tressure silver (DS).

He was sheriff of the county and constable of the castle, where his garrison in 1335 was 60 men-at-arms (3 of them knights), 80 hobelars and mounted archers, a keeper of the king's pavilions and 8 watchmen together with masons, smiths and carpenters. In 1340-42 the strength was 5 knights, 70-80 men-at-arms and about 50 hobelars and archers, but it seems to have varied from time to time. He was appointed justice in the parts of Scotland in English occupation. He was distrained for knighthood 1329, held many manors in Northumberland, Durham and Northants. Edlingham was his chief castle in Northd., styled king's yeoman 1319 and kt. before 1334, keeper of castles in Yorks., of Newcastle upon Tyne 1341-43 when he was sheriff of the county of Northumberland, going beyond seas 1342, served in campaign of Crécy 1346, d. 1358, buried in Edlingham Church where his tomb recess and shield of arms are yet seen (RS, I; CDS, III; HS, PR).

In 1342 Sir Alexander Ramsay of Dalwolsy (Dalhousie) captured the castle by a surprise attack and destroyed the garrison (OPS).

1342. Sir ALEXANDER RAMSAY OF DALHOUSIE.



Argent an eagle displayed sable (AG).

After he had captured the castle he was made warden and sheriff of Teviotdale, he was granted £26.13.4d. for its munition (Ex.R). In 1338 he and his company captured the castle of Dunbar by a similar surprise attack.

1342. Sir WILLIAM DOUGLAS OF LIDDISDALE.

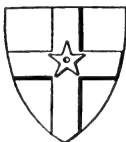


Argent a man's heart gules on a chief azure three molets argent (with difference).

He attacked Ramsay and kept him prisoner in Hermitage Castle, where he died it is said of starvation. Sir William was made warden in Ramsay's place. He was slain in 1353 in Ettrick Forest by William Earl Douglas in revenge for Ramsay's murder.

1346. The castle was restored to Edward III after the battle of Neville's Cross (Durham) 17th October 1346.

1346-55; 1361-64. Sir JOHN COUPLAND.



Argent on a cross sable a molet argent (W).

His name is from Coupland, Northumberland. He is styled king's yeoman in 1344 and as an esquire he captured David of Scotland at Neville's Cross 1346 for which he was made a banneret, 1343-47 employed in Scotland as justice and commissioner, in 1346 was summoned to Westminster with other northern magnates. In 1347 called "gardein" of Rox. with a garrison of 20 men-at-arms and 20 horse-archers. On 2nd April 1347 ordered as constable and sheriff to give up his charges to William of Careswell and his wife Isabel Countess of Mar hereditary keeper and sheriff, but Coupland appears with short intervals to have held these offices until 1359 by indentures of 23rd Feb. 1352 and 20th May 1355. On 10th Feb. 1350 he undertook to keep the castle for a year for 1000 marks with a garrison of 24 men-at-arms, 30 archers, 10 watchmen on the walls and two porters at the gates. On 25th Oct. 1355 he delivered the castle and sheriffdom to Sir Henry Percy. Sir John C. was again sheriff in 1361. He was murdered on Bolton Moor, Northumberland, Dec. 1363, whilst on the king's business. On 23rd Jan. 1364 Sir Alan del Strother was constable and sheriff *vice* Sir John Coupland dead (RS, I; CDS, III and IV; HS, PR, CR).

1347. Sir WILLIAM CARESWELL.



Argent fretty gules and a fess azure
(Duns. Tourn.).

His name is from Caverswell, Staffs. His father William was licensed to make a castle of his house there. He was keeper of Berwick 1341–42, keeper of truce 1342, mar. as her second husband Isabel widow of Donald 12th Earl of Mar, had restitution of her lands 1341, keeper and sheriff of Roxburgh by indenture of 5th Aug. 1347, he undertook to keep the castle with 40 men-at-arms and 50 archers in time of war (RS, I; CDS, III; HS).

1355–57. Sir HENRY PERCY.



Or a lion rampant azure (W).

On 25th Oct. 1355 Sir John Coupland was ordered to deliver the castle and sheriffdom of Roxburgh to Sir Henry P., his term of office to be two years, on 29th Sept. 1357 Percy delivered both to Sir Richard Tempest. Henry P. suc. his f. March 1352, fought at Crécy and in Gascony 1346, 1349, keeper of Berwick, joint warden of the Marches 1352, d. 1368.

1357–61. Sir RICHARD TEMPEST.



Argent a bend between six storm-finches
sable (JO).

S. and h. of Sir John T. of Hartforth and Studley. Sheriff of Berwick 1350, keeper of that town 1350–53, again 1362–63, and 1377–81 with the powers of a warden of the March. On 29th Sept. 1357 he received the castle and sheriffdom of Rox. from Sir Henry Percy. Jan. 1362 a commission was appointed to enquire into his conduct whilst keeper and sheriff, accused of oppressing the people under colour of his office, and retaining Scottish grooms and other unfit persons instead of a proper garrison of men-at-arms and archers and to have taken prisoners by force and without payment. June 1362 to keep Berwick (CDS, III and IV; RS).

1364-76. Sir ALAN DEL STROTHER.



Gules on a bend silver three spread eagles vert (W).

Lord of Lyham in Glendale, Northumberland and other manors in that county, commissioner of array 1357 and later, sheriff of Northumberland 1356-58, keeper of Tyndale 1363 and later, keeper of Roxburgh Castle and sheriff of the county in place of Sir J. Coupland, killed 26th Jan. 1364, he was sheriff until Dec. 1376 when Sir Thomas Percy was appointed, d. 1381 (NCH, CDS).

1376-81. Sir THOMAS PERCY.



Or a lion rampant azure (W).

Appointed keeper of castle and sheriff of the county 1st Dec. 1376. Second s. of Henry Lord Percy (suc. 1352) and heir of the 1st Earl of Northd., b. c. 1343, in France 1369-72, K.G. 1375, adm. of North 1378-80, constable of Jedburgh 1397, cr. Earl of Worcester 1397, joined rebellion of the Earl of Northumberland and Hotspur, taken prisoner at Shrewsbury 1403 and beheaded (RS, CDS, CP).

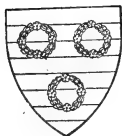
1381-82. Sir MATTHEW REDMAN.



Gules a chevron argent between three cushions ermine tasselled or (W).

Appointed keeper of castle and sheriff of the county for one year from 1st May 1381, his garrison was 30 men-at-arms, 50 horse archers and 57 sergeants of his own retinue, ordered to see that castles on the Marches were fortified and that their owners lived in them 1380, joint warden of West March 1380, commisr. with others to inspect retinue of Henry Percy at Berwick 1385, ordered with others to see that food and coals and lime are provided for Roxburgh 1386, keeper of truce on Marches 1386, jt.-ambassador for peace with Scotland 1387, commisr. of array in Northd. 1388, fought with Hotspur at Otterburn and taken prisoner, there is an interesting account of this episode in Froissart. He was of Levens, Westmorland, mar. Joan, widow of Will. Lord Greystoke and of Sir Anthony Lucy, before 1378. He died c. 1390 (RS, CDS, CP).

1380. RALPH LORD GREYSTOKE.

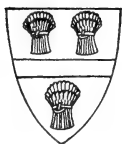


*Barry argent and azure three chaplets
gules (W).*

He was appointed one of the wardens of the West March 10th Nov. 1380, with the keeping of Roxburgh Castle. Whilst on his way to take over his command he was attacked, 25th June 1380, by George, Earl of March on the English side of the

Border in Glendale, taken prisoner with all his baggage and held to heavy ransom in Dunbar Castle until 1382 or later. He was warden of the West Marches in 1386 and d. 1418 (CDS, III; CP).

1382-83. Sir THOMAS BLENKINSOP.



Argent a fess between three garbs sable (J.O.).

Sir Matthew Redman delivered the castle to him on 2nd Feb. 1382, he held it for a further period in 1383. He was of Blenkinsop Castle held of the manor of Langley in South Tyndale, he was employed in Scotland and upon commissions of array in the northern counties from 1369-83, in the famous

Scrope v. Grosvenor armorial trial 1386-89 he gave evidence in favour of Sir Richard Scrope, he said he was then 50 years of age and had borne arms for 30 years, his wife was Margaret widow of Alan del Strother, he was d. before 1389 (RS, CDS, JH, *Scrope v. Grosvenor Trial*).

1384-85. Sir RICHARD TEMPEST and Sir THOMAS SWINBURNE, joint wardens for one year from Easter 1385. (CDS.)

Sir RICHARD TEMPEST (see under 1357-61, p. 37).

1385-88. Sir THOMAS SWINBURNE.



*Gules crusilly three swine's heads argent (and
a label or) (W).*

He held the manors of Gunnerton and Knaresdale, Northumberland, and East Mersey, Essex. In Aug. 1385 he and Rich. T. were ordered to join King Richard with 40 men-at-arms and 80 archers above their garrison at Roxburgh, after Feb. 1385 Sir Thos. appears as sole warden, an office he held until

1388 (RS, CDS, JH, NCH).

1389-91. THOMAS (MOWBRAY) EARL MARSHAL and EARL OF NOTTINGHAM (1366-99).



Gules a lion rampant argent (W).

Created Duke of Norfolk 29th Sept. 1397. Warden of E. March and of Berwick 1389, appointed for 5 years from 1st June 1390, keeper of Roxburgh Castle for one year from 1st June 1389 at a fee of £500, by indenture of 19th Oct. 1389 till 1st June 1391 when he gave up its custody with his own assent (CDS, CP).

1391-96(?). HENRY EARL OF NORTHUMBERLAND.



Quarterly I and IV or a lion rampant azure II and III gules three lucas argent (W).

Henry fourth Lord Percy of Alnwick, cr. Earl of Northumberland 16th July 1377, held in addition to many other high offices in the Kingdom that of warden of the Marches and of Berwick for long periods, he was slain at Bramham Moor 19th Feb.

1408 (CP, CDS, &c.).

1396. Sir JOHN STANLEY.

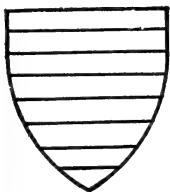


Argent on a bend azure three stags' heads cabossed or (J).

On 12th May 1396 he had protection about to set out for Scotland as warden of Roxburgh Castle, on 20th Oct. 1397 he was licensed to appoint a deputy as he was engaged elsewhere on the king's service, 1st Dec. 1399 received £166.13.4d. in French gold crowns as his fee as warden. He was made K.G. 1404, and cr. King of Man, 1406 (CDS, PR, RS).

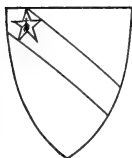
1400-2. RICHARD LORD GREY OF CODNOR and Sir STEPHEN LE SCROPE.

By indenture agree to keep the castle for three years from Sept. 1400 for a fee of 400 mks. a year in wartime and until new works there are finished and afterwards 3000 mks., the garrison during truces to be 40 men-at-arms and 80 archers, in case of a "royal seige" the king is bound to rescue them within three months (CDS, IV).



Barry of argent and azure (W).

He was b. c. 1371, K.G. 1404, in Wales 1405-6, jt-warden E. & W. Marches 1415-16, summd. to parl. 1393-1416, d. 1418 (CDS, CP).



Azure a bend or in chief a molet ermine (U).

He was a younger s. of Richard Lord Scrope of Bolton, he was of Bentley co. York and is named in Shakespeare's *Richard II*, m. Millicent dau. and coh. of Robert Lord Tiptoft. His account for keeping the castle from Dec. 1400 to May 1402 amounted to £3064.5.3½ (CDS, CP).

1402-8. RALPH NEVILLE EARL OF WESTMORLAND.



Gules a saltire argent (W).

S. and h. of John Lord Neville of Raby, b. c. 1354, suc. 1388, cr. Earl of Westmorland 1397, joined Henry IV on his first landing July 1399, K.G. 1402, Warden of Roxburgh 1402-8, employed continuously on the Marches and in Scots affairs until his death in 1425; his splendid tomb remains in Staindrop

church (RS, CDS, CP).

1408-11. Sir JOHN NEVILLE.



Gules a saltire argent and a label argent (Pow).

S. and h. of above Ralph, warden of Roxburgh 1408-11, of West Marches 1414, in France 1417, d. 1423 (RS, CDS, CP).

1411-15. Sir ROBERT UMFRAVILLE.



Gules crusilly and a cinquefoil or (shield at Elsdon). In J. his shield is differenced by a baston azure.

On 11th July 1411 Sir John Neville was ordered to deliver the castle and all its artillery &c. to Sir Robert, appointed warden for six years. He was warden of Jedburgh 1404, commsr. 1411, to repair bridge at Roxburgh 1412, conservator of truce 1436. He suc. Sir Thomas Umfraville as lord of Redesdale and Otterburn. K.G. 1409, vice-admiral of England, called "Robin Mendmarket" because of his success in Border raids, d. 1436. He was ordered on 5th Aug. 1415 to deliver the castle to Ralph Earl of Westmorland (RS, CDS, NCH, XV).

Sept. 1415. JOHN BORELL Esq.

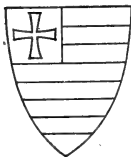


Argent a saltire gules between four leaves vert on a chief azure a lion's head rased between two battle-axes or.

In 1385 John "Boraill" had grant from Rich. II of the lands of John Ker in "Altonbourne and Neysebet" in Teviotdale. He was of the family of Burrell of Howtell, Northumberland. In 1385 he gave half of West Newton in Kirknewton to Thomas del Strother. He was warden for three months only and his expenses amounted to £333-6-8. A John B. was mayor of Berwick in 1449 (RS, II; CDS, NCH, VII).

1416-18. Sir JOHN ETON and Sir JOHN BERTRAM, Kts., to be jt. wardens of the castle from 19th Jan. 1416 for ten years. (CDS, IV.)

Sir JOHN ETON.



Barry gules and argent on a quarter sable a cross patee or (J).

His family has not been traced. On 20th June 1391 he with other English knights was licensed to perform feats of arms (tilt) with certain Scots knights, John Lord Ros to hold the field and act as judge. In 1416-17-18 the Scots were in insurrection and besieging Roxburgh Castle and the wardens received large sums for its munition, bet. June and Dec. 1416, £700; June-Dec. 1417, £1535 besides £26.13.4d. for the carriage of artillery and other stores from the Tower of London to R. as well as £8 for sheaves of arrows (CDS, IV).

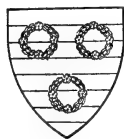
1416-21. Sir JOHN BERTRAM.



Quarterly I and IV *or an orle azure* II and III *argent a fess between three crescents gules*.

Sole warden of Roxburgh castle 1418-20, despatches messengers to summon knights and esquires to resist the Scots besieging the castle April 1417. After this siege he bought 300 lbs. of gunpowder and 500 stones of iron to make new gates. In the years 1419-20 the very large sum of £3862 was spent upon repairs. He was styled late warden Oct. 1421, ambassador to Scotland, 1433-34, conservator of truces 1438, to settle bounds of Berwick and Roxburgh 1438, given power to grant safe conducts 1434-36, on many commissions 1434-38. He was s. and h. of Sir Robert Ogle and took the name of his grandmother Helen Bertram on suc. to her estates of Bothal &c, he was sheriff of Northd. for some years bet. 1410 and 1434, d. 1449, possessed of the lordship of Bothal and other lands in Northumberland (RS, CDS, JH).

1421-25. JOHN LORD GREYSTOKE.



Barry argent and azure three chaplets gules.

Appointed warden for four years on 22nd Mar. 1421, salary £1000 a year in time of peace, £2000 in wartime, commisr. to treat for peace with Scots 1420-21, suc. his father and on 9th May 1418 did homage and fealty for his lands, summd. to Parl. 1419-35, d. 8th Aug. 1436 (RS, CDS, CP).

1425-35. Sir ROBERT OGLE.



Quarterly I and IV *argent a fess between three crescents gules* II and III *or an orle azure* (W).

Appointed warden of castle 17th July 1425 and held the office until 1435, between the years 1425-36 received the large sum of over £10,500, for his expenses at Roxburgh, suc. father in his lands in Northumberland 1410, was styled esquire and a prisoner of the Scots 1400, ktd. before 1408, constable and sheriff of Norham 1410, captain of Berwick 1423, ambassador to Scot. 1424, sheriff of Northumberland 1417, d. 1436 (CP, CDS, IV; RS, II).

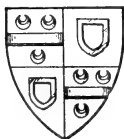
1434-43. SIR RALPH GREY.



Gules a lion rampant and a border engrailed silver (quartering Grey and Fitzhugh).

Appointed warden for one year Midsummer 1434, continued until April 1443, fee £1000 a year in peace, £2000 in war, he also received large sums in the years 1440-43, for the repair and defence of the castle. He bought in 1437 8 "calivers" (cannon) and 2 barrels of gunpowder, 20 crossbows, a barrel of string for them and in 1440 100 bows with 200 sheaves of arrows. He was joint warden of E. March and conservator of truce 1438-39, granted the offices of customer and chamberlain of Berwick 1437 and for life Dec. 1442. He was s. and h. of Sir Thomas Grey of Heton and Wark, ktd. 1426 by the Duke of Bedford, had livery of his lands 1427, mar. Elizabeth dau. of Henry Lord Fitzhugh, d. 1443, bur. in a splendid tomb beside his wife in Chillingham Church (RS, CDS, RND).

1428-39. SIR ROBERT OGLE.



Quarterly I and IV Ogle II and III Bertram.

He suc. his father as joint warden of East Marches with Sir Ralph Grey in 1438 and apparently of Roxburgh Castle also, Nov. 1438 as jt. wardens of Roxburgh Castle they received £543.12.9d. for expenses there, in May 1439 they received £56.13.4d. and £357.13.11d. for the same purpose. Sir Robert Ogle was employed most of his life on the Northumberland Marches. He was keeper of Berwick Castle 1434, of Norham, with other offices in the shires 1436, M.P. Northd. 1436 and 1441, J.P. Northd. 1437 onwards, sheriff of Northd. 1437-38, captain of Berwick 1438, fought on Yorkist side in the Wars of the Roses, summd. to Parl. as Lord Ogle 1461-69, d. 1st Nov. 1469 (CP, CDS, IV; RS, &c.).

1443-60. WILLIAM NEVILLE LORD FAUCONBERGE.



Quarterly I and IV *argent a lion rampant azure* Bruce of Skelton II and III *gules a saltire argent charged with a molet gules* Neville. Badge a *fyshoke* (CP and *Her. & Gen. VIII*).

Appointed warden for 5 years, at usual fees, from 27th Mar. 1443, and remained warden until 1459-60 (in May 1459 he is called "captain" of Roxburgh Castle), in March 1452 Ralph Grey esq. was appointed joint warden with him. He was the eighth s. of Ralph first Earl of Westmorland by his 2nd wife

Joan Beaufort, ktd. at Leicester 19th May 1426, K.G. 1440, appointed warden of Roxburgh for 16 years 14th September 1444 and joint keeper with Sir Ralph Grey 1452, cr. Earl of Kent 1461, Admiral of England 1462, d. probably whilst besieging Alnwick Castle Jan. 1463 (RS, CDS, CP).

1452-60. RALPH GREY Esq.



Gules a lion rampant and a border engrailed argent (J).

He is called joint warden in July 1452 but was probably appointed earlier, he was a kt. in 1453, he continued as jt. warden until Feb. 1460, though he is called late warden in July 1459. He was s. and h. of Sir Ralph Grey, warden 1434-43, had livery of his lands Dec. 1448, sheriff of Northumberland 1455 and 1459, was a Yorkist but later left Edward IV and gave up Alnwick Castle to the Lancastrians, wounded and made prisoner at Bamburgh Castle during its siege in 1464, executed at Pontefract in the same year (RS, CDS, NCH, RND, AA, &c.)

James II, whilst besieging the castle, was killed there by the bursting of a cannon, 3rd August 1460. The castle was captured on 8th August and destroyed by the Scots.

Note.—Acknowledgment is made to the University of Cambridge for permission to reproduce Dr St Joseph's air photograph of the site of the Castle, the copyright of which belongs to that University.

REPORT ON A BRONZE AGE GRAVE DISCOVERED ON CUMLEDGE ESTATE, NEAR DUNS.

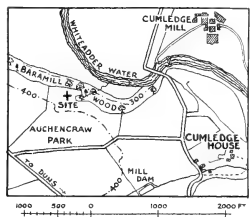
By CHARLES S. T. CALDER, A.R.I.A.S., F.S.A.Scot.

IN a field named Auchencraw Park on Cumledge Estate belonging to Mrs D. G. Wilson-Smith, and about half a mile north-west of Cumledge House, the grave is situated on the crest of the rising ground above the Whiteadder Water, a short distance south of the strip called Baramill Wood (Plate IX fig. 1).

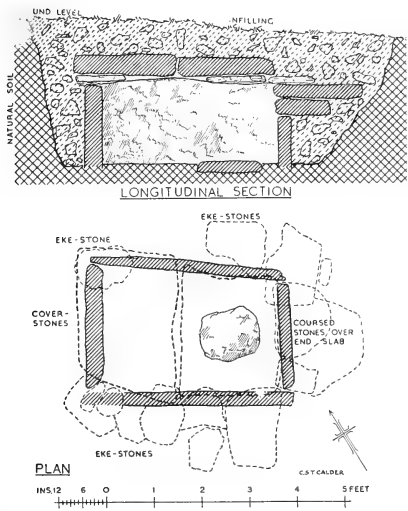
It was discovered on 29th May 1950 when the wheel of a tractor dislodged the eastmost of two coverstones enclosing the cist. Notice of the find was conveyed to me by Mr H. H. Cowan, Secretary of the Berwickshire Naturalists' Club, who, along with Mrs Wilson-Smith, was present during the subsequent excavation.

The grave was constructed of slabs on edge at sides and ends (Plate IX fig. 2 and Plate X). Irregularities in height were levelled up by eke-stones for the steadier seating of the coverstones (Plate IX fig. 2 and Plate XI). Especially was this the case at the south-eastern end, where two courses of masonry were laid on top of the slab which here only rose to the height of 1 foot. The cist measured 3 feet 7 inches in length, and tapered from 2 feet 8 inches to 2 feet 4 inches in width on the line of orientation from north-west to south-east, and it averaged 1 foot 9 inches in depth. Two coverstones side by side spanned the void, and each averaged approximately 2 feet 8 inches by 2 feet and, respectively, 5 and $5\frac{1}{2}$ inches in thickness.

A single flattish stone towards the south-eastern end paved part of the bottom of the cist, and the rest consisted of the natural gravelly subsoil. Amongst the infilling of earth and stones which had gathered inside the grave, fragments of a much broken and decayed skeleton were found. The bones



MAP SHOWING SITE OF BRONZE AGE GRAVE
AT CUMLEDGE. (Fig. 1).



LONGITUDINAL SECTION AND PLAN OF BRONZE
AGE GRAVE AT CUMLEDGE. (Fig. 2).

[To face p. 46.



VIEW OF BRONZE AGE GRAVE AT CUMLEDGE
FROM SOUTH-EAST,
with Coverstones and Eke-stones removed, after Excavation.

were in a disturbed condition through the efforts of the workmen in the extrication of the wheel of the tractor, but from some parts remaining in position it was seen that the body had been laid on its left side in a crouching attitude, with the head to the south-east.

The skeletal fragments were submitted to the Anatomical Department of the Edinburgh University for examination, and were reported on in detail by Dr H. W. Y. Taylor as follows:—

Apart from two ankle bones (talus) and one heel bone (calcaneum) which are whole, the other bones are fragmentary. They are all of human origin and appear to belong to one person. Judging from the part of the hip bone (ilium) preserved and from the general configuration of the skull fragments, they belonged to an adult female.

In detail the bone fragments are:

- (1) From skull, parts of frontal, right and left parietal and ethmoid.
- (2) From vertebral column, parts of two vertebræ, and a small part of the sacrum.
- (3) From ribs, one rib which is almost complete, and there are several small fragments.
- (4) From the upper limb, parts of the right forearm bones, radius and ulna. There are one or two fragments of bones from the palms of the hand, metacarpals.
- (5) From the lower limb there are part of the right hip bone (ilium) and of the left hip bone (ischium), of right and left thigh bone (femur), of right and left tibia and fibula.

From the foot, a few fragments of metatarsals, of right and left ankle bones (talus) in good condition, and also of the right and left calcaneum.

- (6) Five teeth showing no sign of caries included three premolar and two molars.

All the bones were of a light brown colour and of moderate length and thickness.

There was enough material in the skull bones to show the contour of the skull from the nasion to the lambda, and between the parietal eminences. The general shape and proportions

resembled those of a mesaticephalic whole skull, that is, one of a cephalic index between 75 and 80.

The frontal bone was shaped like that of modern man.

Dr Taylor's findings are confirmed in a covering note by Dr L. H. Wells, Lecturer in Physical Anthropology, Edinburgh University, who states:

I agree with Dr Taylor's conclusion that the remains are those of a young adult female. It is possible that the braincase was somewhat narrower than he suggests, so that it may have fallen below the lower limit of mesaticephaly, but it appears to have been well filled out. Comparison with the Early Bronze Age material available to me here reveals nothing inconsistent with the ascription of the Cumledge remains to that period.

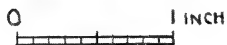
From the disordered area of the upper half of the skeleton the steward of Cumledge Mills Farm had earlier picked up a perforated disc of lignite which may have been used as a pendant amulet (Plate XII). Its dimensions are: overall diameter 1·7 inches, perforation diameter ·75 of an inch and thickness ·35 of an inch. The surface is plain and smooth and the edges are rounded.

The relic has been presented to the National Museum of Antiquities of Scotland by Mrs Wilson-Smith, to whom, as well as to Mr Cowan, Dr Taylor and Dr Wells, thanks are hereby expressed for their interest and kind assistance. Thanks are also due to the Royal Commission on the Ancient and Historical Monuments of Scotland for the authorisation to publish the above account.

Note.—Acknowledgment is made to the Royal Commission on the Ancient and Historical Monuments of Scotland for permission to reproduce the two plans and the two photographs of the grave referred to above, which are Crown Copyright, and to the National Museum of Antiquities, Edinburgh, for a similar permission in the case of the photograph of the lignite disc. The Club is also much indebted to both the Royal Commission and the Society of Antiquarians of Scotland for their courtesy in assigning to it the right of original publication of the Report.



VIEW OF BRONZE AGE GRAVE AT CUMLEDGE
FROM SOUTH-EAST,
showing one Coverstone and Eke-stones in position, before Excavation.



LIGNITE DISC FOUND IN GRAVE.

NOTE ON IRON AGE POTTERY FROM BUNKLE EDGE.

By K. A. STEER, Ph.D., F.S.A., F.S.A.Scot.

IN August 1950 I discovered nine fragments of native pottery embedded in the earth and stones adhering to the roots of a fallen tree within one of the notable chain of forts on Bunkle Edge. The fort in question is situated in Marygoldhill Plantation, 700 yards north-west of Marygold Farm; it is No. 3 in Lynn's paper,¹ and No. 18 in the Royal Commission's Inventory of Berwickshire.² The pottery, which has been deposited in the National Museum of Antiquities, comprises two contiguous pieces of the inturned roll-rim of a large vessel, measuring about 8 inches in diameter at the mouth, and seven wall-fragments. All the pieces are made by hand of coarsely levigated clay, and are smoothed externally: one bears grass-stalk impressions on the outside. This type of ware is commonly found in Iron Age forts and homesteads between the Forth and Tyne, and the Marygold rim-section is closely matched by two others found in Hownam Rings fort in 1948.³

Owing to a heavy overgrowth of bracken it was impossible to determine whether the tree had been standing in any sort of structure, but the point could easily be decided by a little excavation. It should be noted, however, that the pottery is not necessarily associated with the fort; it may equally well belong to a later occupation of the site when, on the evidence of the Commission's plan, the defences appear to have been disused, and huts were built outside them on the east.

¹ *Proceedings of the Berwickshire Naturalists' Club* (1894-95), pp. 368-372.

² Sixth Report, pp. 7-8 and fig. 5.

³ *Proceedings of the Society of Antiquaries of Scotland*, vol. lxxxii, fig. 10, IV A, 1-2.

NOTE ON THREE SCULPTURED ROCKS IN NORTH NORTHUMBERLAND.

By SIR WALTER AITCHISON, M.A., F.S.A., F.S.A.Scot.

OUR Secretary's interesting paper on "Sculptured Rocks" in Vol. XXXI reminds me of three examples in North Northumberland hitherto unreported. It is right that they should be officially recorded; so here follow particulars. (Map references are to O.S. Popular 1", England, Sheet 71.)

National Grid Reference.	Site of Rock.	Type of Mark.	Aspect.	Found and reported to me by	Remarks.
119053	On Rimside Moor within 30 feet of north side of highway, near east end of dry-stone wall bounding road.	Single cup and ring.	On upper face sloping to south.	Mr Robson, County Council Roadman.	Concealed (when I last examined it) by a coverlet of living moss, which can, however, be folded back to reveal marking.
132108	In Lemmington Wood, on west side of footpath leading from the railway bridge at south-west corner to Ros Cottages on top of the hill.	Single cup and ring.	On the upper face of a 6-foot outcrop, slightly sloping to the east.	Mr F. E. Lupton, Manager, Lemmington Estate.	On private land.
992227	On South Middleton Moor, about 250 yards north of the beginning of the moor road to Threestoneburn Farmhouse, on a bracken-covered	Single cup and ring.	On east face of a small isolated stone.	Mr Anderson, shepherd, Middleton Dene.	Interesting because on an isolated block of sandstone (? deliberately imported) in the porphyry country.

NOTE ON "A LIST OF THE BRYO-
PHYTES OF NORTHUMBERLAND"
BY J. B. DUNCAN.

By R. HALL.

THIS list, reprinted from the *Transactions of the Natural History Society of Northumberland, Durham and Newcastle-on-Tyne*, vol. x, Part I, was published in January 1951, and is the result of more than fifteen years of unceasing work by Mr Duncan. He was assisted in its preparation by Miss E. M. Lobley of Hexham, who was responsible for the list of the Sphagna.

The list replaces and summarises the work of N. J. Winch (1838), Dr Johnston (1853), Dr Hardy (1868), and H. N. Dixon (1905). Localities are given for 623 species and varieties of bryophytes, including 342 species and 86 varieties of true mosses. This is a very fine moss flora for the county and we should be duly proud of it.

Mr Duncan has prepared a similar list for Berwickshire, which was published in June 1946. These two lists will form a sound basis for the work of future bryologists in this area.

Among the notable finds are *Dicranum montanum* and *D. strictum*—High Wood, Bowsden, *Dicranum Bergeri*—Ford Moss, and *D. spurium*—Lyham Moor, last found there by W. B. Boyd in 1869. The most interesting areas in the county are undoubtedly the Cheviots, Ross Links and Holy Island, and Mr Duncan has named many rare species from them: e.g. *Splachnum vassenlosum*, *Grimmia elongata*, *Mnium cinclidioides* and *Bryum Duvalii* from the Cheviots; *Hypnum Sendtueri*, *H. Wilsoni* and *Bryum calophyllum* from Ross Links and Holy Island.

Mr Duncan is eminently suited to produce such a list, as he was Vice-President and then President of the British Bryological Society from 1935 to 1938. He was Treasurer of the Society for a considerable time, and has only recently given up his post as Referee for the Hypnaceæ. Indeed, he has been one of the foremost bryological experts in the country for many years.

REPORT ON THE ACTIVITIES OF THE SCOTTISH REGIONAL GROUP OF THE COUNCIL FOR BRITISH ARCHÆOLOGY.

By J. A. THOMSON, F.F.A., F.S.A.Scot.

SOME six years ago the Club responded to an invitation to become a member of the Scottish Regional Group of this Council, and in respect of this membership it pays an annual subscription of 10s. to the Group, plus a sum representing twopence per head of its own members to the parent Council. An annual meeting of the Group is held in Edinburgh, and on recent occasions the Club has been represented by Mr Buist and Mr J. A. Thomson. Delegates attended also from other Scottish centres, ranging from Elgin in the north to Dumfries in the south; while Glasgow, Falkirk, Perth and Bute all sent representatives. One came away from the meetings with the satisfactory feeling that a great deal was being done to encourage the study of archæology in Scotland, a special effort being made, mainly through the schools, to interest young people in this branch of their country's history.

The Regional Group arranges an annual excursion, and at this year's—which was to Culross and Dunfermline on Saturday, 10th June—the Club was represented by Mrs Aitchison and Mr Thomson. The morning was spent at Culross, where first the Abbey was visited, under the guidance of the parish minister, the Rev. J. M. Gow, M.A., and Dr Douglas Simpson, of Aberdeen University, and afterwards a tour was made of the "Palace" and the town. The Abbey, with its memories of St Servanus (St Serf) and St Kentigern (St Mungo)—the latter of whom was born and brought up there—comprises an extensive range of buildings, laid out on the familiar conventical pattern. Unfortunately they are mostly in ruins; but the Parish Church, which occupies the site of the old church in which the monks worshipped, and was competently and beautifully restored in 1905, has many features of architectural interest. The town

itself is something of an "exhibition piece" of Scottish burghal life in the heyday of its prosperity, when the underlying coal-seams were being worked—albeit in somewhat primitive fashion—and Culross hand-made "girdles" were an article of commerce much in demand. The burghers of those days had been able to house themselves in comfort, and with no small degree of dignity.

At Dunfermline, in the afternoon, we were again fortunate in our leadership. Dr Douglas Simpson dealt with the architectural features of the exterior ruins of the Palace and the Abbey, and the Rev. Dr Webster took us through the various stages of the history of the Church, from the days of the Culdee foundation, down through those of Queen Margaret (whose marriage with Malcolm Canmore was celebrated there, and whose tomb we saw) and King Robert the Bruce, to the restoration, a century ago, of the choir, said to be an excellent example of nineteenth-century Gothic at its best. We looked with reverent interest on the tomb of the Bruce, the opening of which, in 1818, brought tears to the eyes of Sir Walter Scott, when the mortal remains of the hero-king were revealed.

An adjournment to the adjoining Pittencrieff Park—one of Mr Carnegie's many benefactions to his native town—and a sociable meal in the well-appointed tea pavilion there, rounded off an exceedingly enjoyable and, it is hoped, well-spent day.

OBITUARY NOTICE.

GEORGE WATSON, M.A. (OXON.), F.S.A. SCOT.
1876-1950.

By JOHN ALLAN, C.B., LL.D.

By the death of George Watson on 8th November 1950, in his seventy-fifth year, the Club lost one of its most distinguished members, one who had not only made many notable contributions to the studies with which the Club is specially concerned, but who also had an international reputation as a lexicographer and authority on the English language and its dialects.

George Marr Watson was born in Jedburgh, and educated at the Sessional School there. Antiquarian interest was in his blood, for his father was a cousin of James Watson, the historian of Jedburgh Abbey. On leaving school he worked for a time in the office of the *Jedburgh Gazette*, and then trained as a printer with his relative, Thomas Smail, the publisher of an excellent *Guide to Jedburgh, Jethart Worthies*, and other works of local interest. He then went to Edinburgh, where he worked for a number of years as a reader with the well-known printing firm of R. & R. Clark. All this time he was educating himself; he was entirely self-taught, and not only learned Latin but became an authority on Scottish philology and history, contributing frequently to the local press and the *Transactions of the Hawick Archaeological Society*. In 1907 his reputation for accurate scholarship was such that he was appointed to the staff of the *New English Dictionary*—then under the editorship of Sir James Murray, a native of Denholm—and moved to Oxford, where he worked for the next twenty years on the volumes N to W. In the absence of Sir William Craigie he was entirely responsible for the volume on the letter W. Service in the First World War did not interrupt his work, for he continued to read the proofs of the *Dictionary* even in the trenches.

When Sir William Craigie¹ went to Chicago to undertake the preparation of a *Dictionary of American English*, Watson² joined him in 1927 and saw the first volume A-B through the press (1938). During his stay in America he published an article in *American Speech* in 1938 on *Nahuatl Words in American Speech*, an exhaustive study of loan-words from Indian dialects. He was also appointed an Assistant Professor of English in the University of Chicago, a post he retained for some time after his return to England in 1937. He settled again in Oxford, and devoted himself to the study of Border literature and history and Scottish dialects. His most notable work had appeared in 1923, when the Cambridge University Press published his *Roxburghshire Word-Book*, an exhaustive study of the vocabulary of the county, excluding words general to Scotland, on which he had worked for many years—a valuable complement to Sir James Murray's *Dialect of the South of Scotland*. The value of this book was widely recognised by scholars and soon became quoted as a standard work, but it did not receive the support from the educated but non-specialist public which it deserved. As an authority on dialect his assistance was acknowledged by Sir James Wilson in his books on the subject, and Watson wrote a brief but valuable preface to the *Dialects of Central Scotland* (1926). It is a tribute to his wide knowledge and reputation that he was asked to read the proofs of the English translation from the Danish of Dr Jakobsen's *Etymological Dictionary of the Norn Language of Shetland*, which appeared in two volumes in 1928. He also gave much assistance to the preparation of the *Scottish National Dictionary* and the *Dictionary of the Older Scottish Tongue*, and he was a member of the Corresponding Committee of Experts of the former. His last years were spent, in spite of failing health, which he faced with an indomitable and unrepining spirit, in the preparation, for the Scottish Text Society, of the *Mar Lodge Translation of*

¹ One may record as a specimen of American English, the headline with which the *Chicago Tribune* announced Sir William's appointment, "Limey Prof. to Dope Yank Talk."

² Watson was fond of telling the story of how the immigration officer in New York, seeing him described as "lexicographer" on his passport, welcomed him with "Come in, Mr Watson. I guess you're the first lexicographer we've had in the U.S.A."—and this in the land of Noah Webster!

the History of Scotland by Hector Boece, of which the first volume only has appeared (1946).

In 1933 his services to scholarship, and in particular to the *Oxford English Dictionary*, were recognised when Oxford gave him the honorary degree of M.A. Soon afterwards he was the first guest of honour at the dinner of the recently formed Jethart Callants' Club, when a tribute to his work was paid by Provost Wells Mabon. He was elected an F.S.A.Scot. in 1944 and a member of the Berwickshire Naturalists' Club in 1947. To the Club's *History* he contributed the following articles: "Edwardley" (vol. xvii), "Cuthbertshope" (vol. xix), "The Franciscan Priory, Jedburgh" (vol. xx), on "A Group of Related Place-Names" and on "Disparaging Place-Names of Roxburghshire" (vol. xxxi).

A member of the Hawick Archæological Society since 1900, he contributed some fifty articles to its *Transactions* on local history, biography, folklore and dialect, of which one can only mention here those on Cessford Castle, Ferniehirst Castle, Jedburgh Abbey, Border Ball-Games, Prince Charles on the Border (in which he recorded much tradition which might have been lost), and the Dialect of Teviotdale. A very frequent contributor to the local press, notably the *Jedburgh Gazette* and *Kelso Chronicle*, many of his longer articles were reprinted and privately distributed. He was also a frequent contributor to the *Border Magazine*, the *Border Almanac*, and the *Records of the Jedburgh Ramblers' Club*, and an occasional contributor to the *Transactions of the Dumfries and Galloway Antiquarian Society*.

To the *Transactions of the Scottish Ecclesiological Society* he made two notable contributions to Scottish history in "The Black Rood of Scotland" (1907) and "The Coronation Stone of Scotland" (1910), which reveal at their best his knowledge of original sources, sound judgment, and desire to get at the facts.

Ever ready to put his knowledge at the disposal of others, Watson gave much help, for example, in the preparation of J. Logan Mack's *The Border Line*, and by the organisation of the Jedburgh Callants' Festival, for which he prepared the handbook. In his young days he was responsible for the organisation of the "Toonheid Games" in Jedburgh, which did not survive his departure from the town.

A great walker, he had visited every place of interest in the Borders on foot. In his investigation of Queen Mary's Ride, for example, he followed her route to Hermitage Castle and back in a day, and in his *Scaur Caves of Teviotdale* talks casually of all the caves being easily seen in a twenty-mile walk. While in the States he travelled widely, and has recorded his trip to California and back, to visit an uncle, in an old Essex, of the mechanics of which he was blissfully ignorant. In Chicago he had the experience of being relieved of his salary by a gangster with a revolver while on his way home from the University.

Watson found time to become a keen amateur astronomer, and some of his early contributions to the local press were signed "Astron." He had a natural gift for music and played several instruments, though his speciality was the cornet, which he played in his young days in the Jedforest Instrumental Band.

George Watson's main characteristics were his accuracy, his modesty, and his relentless desire to get at the truth. All his work is characterised by a desire to get at facts. He took nothing from hearsay or the writings of authors, but always went for the original sources, which he used with sound judgment aided by a remarkable memory and tremendous industry. His success within his chosen sphere was complete. A bibliography of his scattered writings would be a suitable tribute to his memory and of great value to future students.

Watson was much impressed by the Club's Centenary Index, and gave a handsome contribution to the Hawick Archæological Society to encourage them to do something similar. He never wavered in his devotion to Jedburgh, and bequeathed £100 to the Jethart Callants' Club, the activities of which he had done so much to put on right historical lines.

He was married, but his wife died not long after their return from the U.S.A.

"Quench'd is his lamp of varied lore."

NOTE ON "SILVIA": POEMS
BY T. MCGREGOR TAIT.

MR TAIT has favoured us with a copy of another small book of verse, mostly sonnets, first published in 1933, which recalls scenes visited by the Club over the years: Dod Law, Haggerston Castle, the Whiteadder, St Abbs. Generally, though competently written, the poems strike us as rather overloaded with a bygone formality. We prefer the author as a poet of nature, where his powers of detailed first-hand observation appear at their best, rather than as a derivative poet of place. "Willow-Warbler (Spring)" and "Grass of Parnassus," for example, are charming by their very simplicity and "rightness" of touch. Half a dozen skilfully woven triolets complete a collection valuable, apart from technical considerations, as a record of pleasures shared. The book is excellently produced by the printers of the *History*.

10 DEC 1951

ORNITHOLOGICAL AND OTHER NOTES.

ORNITHOLOGY.

Date in 1950.	Species of Bird.	Seen by	Place and Remarks.
Feb. 12.	Snow-bunting.	Col. W. M. Logan Home.	Flying over Greenlaw Moor.
April 16.	Pair of Gadwall. Pair of Shovellers.	„	On Greenlaw Moor Loch.
May 1 to June 4.	3 ♂♂ Pied Fly-catchers.	„	Edrom House drive. No ♀♀ arrived in 1950, and 1 ♂ built an unusually large nest inside one of the nest-boxes.
Dec. 3, 8.40 p.m.	Tawny Owl and Blackbird incident.	„	Edrom House; a loud flapping noise attracted attention, and a tawny owl was seen to be clinging to the outside of the lounge window. It was looking intently downwards. Then a blackbird was seen to be crouching on the window-sill. On the observer approaching the window, both owl and blackbird flew off, but the blackbird reappeared at another window. Before the observer could open the window the owl suddenly reappeared, pounced on the blackbird and carried it off into the night.

ENTOMOLOGY.

Date in 1950.	Species.	Seen by	Place and Remarks.
June 11.	Large cabbage white Butterflies (<i>Pieris brassica</i>).	A Fisherman, reported to W.B. Laidlaw.	A cloud of white butterflies seen heading for the coast two miles out to sea between Eyemouth and Burnmouth.
Feb. 15.	Pale brindled Beauty Moth (<i>Philagia pedaria</i>).	W. B. Laidlaw.	Came to light.
June 14.	Dew Moth (<i>Endrosa irrorella</i>).	„	On coastal cliffs. This is a very local species and not common in Scotland. The larva feeds on lichens on cliffs.
Aug. 18.	The Chi-Moth (<i>Polia chi</i> , var. <i>Olivacea</i>).	„	Not very common anywhere.
Oct. 7.	The Red Sword-grass Moth (c. <i>vetusta</i>).	„	Came to light. Not common.
May 25. June 6.	Apidæ: <i>Osmia rufa</i> ♂. „ „ ♀.	„	In old wood.
Aug. 25.	Beetles: 1 <i>Metoccus paradoxicus</i> .	„	On ash-trunk.

BOTANY (Two Years).

Dates.	Name of Plant.	Seen by	Place and Remarks.
July 3, 1949. 1950.	<i>Goodyera repens.</i>	Mrs Swinton.	Near Coldstream.
July 13, 1949.	<i>Galium boreale.</i>	„	Hirsel Woods.
July 30, 1949.	<i>Epipactis latifolia.</i>	„	Coldstream.
Sept. 27, 1949. Aug. 16, 1950.	<i>Rumex maritimus.</i>	„	„
June 1949, 1950.	<i>Corallorhiza innata.</i>	Miss Logan Home.	Coldingham.
Aug. 1949.	<i>Listera cordata.</i>	„	Coldingham Moors.
May 26, 1949.	<i>Neottia nidusavis.</i>	„	„
Aug. 5, 1949.	<i>Melilotus alba.</i>	„	Eyemouth.

RAINFALL IN BERWICKSHIRE DURING 1950.

Compiled by the Rev. A. E. SWINTON of Swinton, M.A., F.R.Met.S.

RAINFALL IN BERWICKSHIRE DURING 1950

63

Station.	Height above sea-level.	Month.	Dura- tion.	Swinton House.	Hours.
		January .			36.8
		February .			63.5
		March .			29.9
		April .			44.8
		May .			35.3
		June .			42.7
		July .			35.8
		August .			33.2
		September .			78.9
		October .			31.9
		November .			103.4
		December .			67.5
		Year .			603.7
St Abb's Head.	280'	.91 2.13 1.55 1.99 1.89 1.39 2.45 2.54 3.89 1.26 5.09 1.33			
Tweedhill.	50'	1.05 2.07 1.12 2.11 1.38 1.32 2.44 3.97 4.29 1.41 5.04 2.61			
Whitchester.	838'	1.22 2.51 2.43 2.33 1.97 2.26 2.53 2.04 4.06 1.76 7.48 2.55			
Oxendean (Duns).		No records received.			
Duns Castle.	500'	1.40 2.45 1.98 2.48 1.59 2.18 2.37 2.82 4.32 1.66 6.23 2.18			
Manderston.	498'	1.32 1.75 1.72 1.89 1.53 2.12 2.74 2.88 4.18 1.43 6.82 1.70			
Swinton House.	200'	1.28 2.56 1.51 1.90 1.69 2.06 1.82 2.71 3.80 1.58 5.39 2.06			
Lochton.	150'	1.07 2.77 1.23 1.45 1.53 1.77 2.71 2.45 3.62 1.45 4.46 1.22			
Marchmont.	498'	1.32 2.57 1.80 2.55 1.55 2.60 2.71 2.72 4.16 1.69 6.05 1.91			
Cowdenknoves.	300'	1.84 2.93 1.84 2.17 1.03 1.96 2.94 2.79 4.14 1.37 3.94 1.26			
The Roan, Lauder.	550'	1.81 3.04 2.15 2.27 1.07 1.53 3.26 2.87 4.16 1.67 4.38 2.04			

TREASURER'S FINANCIAL STATEMENT FOR YEAR ENDING 20th SEPTEMBER 1950.

RECEIPTS.

Credit Balance at 20th September 1949	£248 5 5
<i>Subscriptions</i> (including Entrance Fees and Donations)	369 13 9
<i>Sale of Club Badges</i>	6 0 0
<i>Sale of Proceedings</i>	1 10 0

PAYMENTS.

<i>Proceedings for 1948</i>	£214 11 0
<i>Printing and Stationery—</i>	
Neill & Co. Ltd.	£48 3 8
Martin Ltd.	5 17 2
Chivers	1 1 8
<i>Library—</i>	55 2 6
Rent of room and cleaning	1 0 0
<i>Official Expenses—</i>	
Secretary (H. H. C.)	£43 2 10
Editing Secretary (A. A. B.)	3 10 0
Treasurer (T. P.)	6 4 3
Treasurer (H. F. M. C.)	2 10 0
<i>Subscriptions—</i>	55 7 1
Royal Society for the Protection of Birds	£1 1 0
Chillingham Wild Cattle Association	1 1 0
Regional Council of British Archaeology	3 7 0
British Association	2 2 0
<i>Miscellaneous—</i>	7 11 0
King's Arms Hotel for Meeting	£2 2 0
Cheque Book	0 4 0
Credit Balance at Bank 20th September 1950	289 11 7
	<u>£625 9 2</u>

APPROXIMATE BALANCE SHEET.

LIABILITIES.

Estimated Account for printing <i>Proceedings</i>	£200 0 0
Credit Balances: General Account	£89 11 7
Investment Account	150 13 2
	<u>240 4 9</u>
	<u>£440 4 9</u>

ASSETS.

Cash in Bank: on General Account	£289 11 7
on Investment Account	150 13 2
	<u>£440 4 9</u>
	<u>£440 4 9</u>

1 0 DEC 1951



HISTORY
OF THE
BERWICKSHIRE
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OF THE

BERWICKSHIRE
NATURALISTS' CLUB

INSTITUTED SEPTEMBER 22, 1831

"MARE ET TELLUS, ET, QUOD TEGIT OMNIA, CÆLUM"

VOL. XXXII. PART II.

1951

Price to Members (extra copies) 7s. 6d. 10/-

Price to Non-Members 10s. 15/-

EDINBURGH

PRINTED FOR THE CLUB

BY NEILL AND CO. LTD., 212 CAUSEWAYSIDE

1952

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PROCEEDINGS
OF THE
BERWICKSHIRE NATURALISTS' CLUB

LIFE IN SCOTTISH CASTLES
IN THE MIDDLE AGES.

*Address delivered to the Berwickshire Naturalists' Club
at Berwick, 3rd October 1951, by Rev. HALBERT J. BOYD.*

WE all have seen the old, crumbling battlements and towers of ruined castles, and at least a fleeting thought has crossed your minds of the years gone by when these were the homes of great families. You have wondered what they were like, these people of long ago, what were their occupations, how did they pass their time with hardly any books, no newspapers or places of entertainment such as cinemas and theatres, without, indeed, almost any of the diversions which to-day we count indispensable.

I am going to try to recall the old days to you. Away with four hundred years or more! You are back in the past and we shall watch a baronial family of that period and see how their habits differ from our own.

The first thing that you notice in your vision is that the castle which seemed so solitary is now by no means so. Within easy reach now clusters a large village of

huts. In these the retainers of the laird or baron live. It is called the town (pronounced "toon"). You look at these habitations in horror; for they are unspeakably wretched. Walls without lime are filled in with mud. Roofs are thatched with rushes. There may be two or three compartments only to each house; one occupied by a cow and a horse. Narrow windows are shielded only by wooden shutters. Floors are earthen, and in the centre of one is the fire. There is no chimney. The smoke escapes through a hole in the roof. The inhabitants cultivate the laird's land. They are "kindly" tenants—that is to say, they receive no wages; but neither do they pay rent. They surrender to the laird a large proportion of the produce of the fields. But more than that: they are absolutely at their master's command, and should he require them for military purposes, they are bound to attend him, armed and mounted. He may have over them the right of "pit and gallows." In other words, he can hang a man or drown a woman for misdemeanour.

We pass through the gateway of the encircling outer wall or "barmkyn," as it is called. Every owner of £100 land or more is compelled by law to build that enclosure as protection against invasion. It has to be roughly one yard thick and six yards high.

The door of the castle leads you straight to the dungeons—vaulted, windowless. Here cattle and horses might be housed in time of siege. Here also, of course, prisoners were confined. Terrible stories are recounted of the cruelties these have witnessed. Let me tell you one. The great Border castle of Hermitage was owned during the fourteenth century by Sir William Douglas, known as "The Flower of Chivalry." Being jealous that his friend, Sir Alexander Ramsay of Dalhousie, should have been appointed Sheriff rather than himself, he captured Ramsay and threw him, horse and man, into his castle dungeon. A trickle of corn falling from a

granary above prolonged the wretched prisoner's life for some days before starvation ended it. Little over a hundred years ago, a labourer discovered a vault beneath the castle containing chaff, bones, and fragments of iron, amongst which was an old bridle-bit—confirmation of the story.

Continuing our progress, we mount a spiral stairway, the windings of which are from left to right, so that a single man, free to use his right arm, can defend the way. This leads to the great hall, of which I shall tell later. It is the principal living-room of the castle. Small anterooms adjoin. Upwards again, we pass to the bedroom storeys and so reach the castle-head. It is battlemented on all sides. On it stands a cottage-like structure, the Cape House, used, no doubt, as shelter for the sentries when off duty. About it is a passage with stone seats. It is the "bartisan," where the ladies of the household may walk and take the air at such times as it is dangerous for them to ride abroad. Standing high above one corner of the castle-head is a huge iron basket, in which fuel is always kept ready to be ignited. It is the "fire pan." From it smoke by day and fire by night will give warning of raid or other attack to all the country around. The last occasion on which beacon signals were used in Scotland was on a false alarm of invasion during the Napoleonic wars.

We have glanced at the outside retainers. Now let us see what staff of indoor servants was needed to run this establishment. They were in amazing numbers, even in the houses of comparatively humble lairds. Let me quote you a letter written about the period of the Union of the Crowns by an English poet named Taylor, who thus describes his visit to Scotland: "In Scotland, beyond Edenborough, I have been at houses like castles for building; the master of the house, his beaver being his blue bonnet, one that will wear no other shirts but of the flaxe that grows on his owne ground, and of his

wife's, daughter's, or servant's spinning; that hath his stockings, hose and jerkin of the wool of his own sheepe's backs; that never (by his pride of apparell) caused mercer, draper, silkman, embroyderer or haberdasher to brake and turn bankrupt; and yet this plaine, home-spunne fellow keepes and maintains thirty, forty, fifty servants, or perhaps more, every day relieving three or four score poore people at his gate; and besides all this can give noble entertainment for four or five days together to five or six Earls and Lords, besides Knights, Gentlemen and their followers, if there be three or four hundred men and horse of them, where they shall not only feede but feast, and not only feast but banquet."

Chief amongst the domestic servants was the House Steward or Butler. He was the forerunner of a type which lingered on even within my own recollection as a boy. He became identified with the family he served and considered himself indispensable. Long after he was incapable of work he would remain as an indulged pensioner, often the confidant of many a family secret, a counsellor, a friend. He was accustomed to use a freedom of speech which would not be tolerated to-day; but it was not impertinent. It was simply a claim to independence of mind, honestly expressed. Innumerable stories are told in Scotland of the old family butler. Let me digress to a later period to tell you one.

The toothbrush had been introduced to England and to southern Scotland; but it had never been so much as heard of in the Highlands at the time of this story. A Highland laird had invited an English friend to stay with him. The morning after his arrival the family assembled for breakfast, but there was no sign of the guest. At length the laird, becoming uneasy, hailed the butler. "Go, Donald," he bade, "and see if Mr Brown is ready for breakfast." Donald departed and presently returned. "Well," asked the laird, "is he getting

ready?" "Oo aye," answered Donald, "he's gettin' ready. I saw him sharpenin' his teeth."

Let us return to the Middle Ages. How did the people pass their time? The lord or laird would, of course, superintend to some extent the management of his estate. In his leisure hours he enjoyed such games as golf (played for centuries in Scotland before England adopted it). He practised archery, and, above all, he had hunting and coursing to amuse him.

As to the great lady, she would awake in the morning to find a fire burning brightly in her room. Arising, her maidens bring her her slippers and "wyliecoat" (dressing gown) already warmed to be wrapped around her. A stool is placed near the fire and on it she sits while two maidens comb her hair. She herself directs them, holding a steel mirror in her hand. When she is dressed she drinks a cup of Malvoisie sweetened with sugar. A short stroll in the garden prepares her for "disjune" or déjeuner, which may consist of a pair of plovers, partridge or a quail, washed down with a cup of sack. She then sees to her housekeeping, directing her maidens in their various tasks, such as spinning, making of quoifs, ruffs and other articles of fine linen for her own use. For any slackness on the part of a maid she may be soundly beaten. On the other hand, a remarkable formality of address is accorded all servants. Scottish gentlefolk for long addressed their senior men and maid servants as Mister and Mistress.

Pleasantly fatigued by domestic duties, the lady now returns for her "morning draught." A slice of brawn, or salted salmon, adds flavour to a cup or two of Muscadel. She will finish with some raisins or capers. In the afternoon she may ride abroad, or, if the day is cold, she will sit by the fire over her embroidery. Supper is early and is a tremendous event. Let us watch it.

It has been a warm summer day and the wooden window shutters, by which only wind and rain can be

excluded from the great hall, are open. The floor is strewn with rushes and sweet-smelling herbs, and at one end it is raised about six inches higher than the rest, forming a low platform. This is the dais—pronounced “des.” There is a room behind it called the “chalmer-à-des.” This is the laird’s bedroom and into it all the gentlefolk will retire after supper.

May I pause for a moment to remark that baronial hall, dais, and dais-chamber are still maintained in the colleges of Oxford and Cambridge, except that the dais-chamber is now known as the Don’s Common Room.

Across the dais and down both sides of the hall tables have been set for supper. For this purpose they have been removed from the walls against which they were leaning. They have no legs and so have to be supported on trestles. The dais-table may be covered with a green cloth. It is the “hie-burd,” at which the gentlefolk will sit. In the centre is the only chair in the room, placed there for the master of the house. Hence the term “chairman,” of modern meetings. Other people, gentle and simple, sit on stools. Little other furniture is to be seen. Against the wall is the “cup-burd,” not, as the name now implies, a closed receptacle, but a sort of sideboard on which household silver is displayed—tankards, candlesticks and bowls. Near the “cup-burd” you may see a great wooden chest containing household linen. And in a window recess stands a spinning-wheel. The walls are whitewashed and bare, except behind the dais, where tapestry may be hung. Against the walls are stands of arms—jacks, steel caps, spears and cross-bows. The room is indeed an armoury. You will see also a “blawin’ horn” hanging there. By the great open fireplace dogs are lying, and perhaps on a perch is the favourite hawk of the baron. Around the hearth men-servants will sleep, fully clad, at night.

The hour for supper has come. The horn is blown,

probably from the window, and in they all come. What sort of clothes do they wear? You will not see much difference between the baron's costume and that of his men. They all wear the blue bonnet; for only about the time of Charles II did gentlemen begin to wear hats. Some have only coarse woollen shirts; but most wear doublets of homespun, and all have worsted hose drawn up to the thigh. And all wear shoes.

Ladies have kerchiefs draped in a two-fold, horn-like structure over their heads. They may be very splendidly attired in silks and velvets. Other women have skirts of coarse druggit and shawls pinned from crown to breast. The maids have "snoods"—ribbons tied around their brows. Married women wear "mutches"—linen caps. Almost all of the lower class are barefooted. You will notice that, though within doors, the gentlemen continue to wear their hats. Only the serving men are bareheaded.

What sort of dishes do you see on the table? They are of pewter or of wood. Horn spoons are provided for all, and every man takes a knife from his belt with which to eat his food. There are as yet no forks; fingers, therefore, are freely used, as Nature intended they should be. On the dais table you will see silver goblets; but by the simple folk horn cups are used. There are no tumblers. The earliest mention of them is by Pepys. They were literally tumblers, because, having a rounded base, they could not stand upright, but had to be emptied at a draught and turned upside down.

By the dais table a serving lad stands with water jug and basin, a towel being hung over his arm. He passes from one to another in order that fingers may be washed. The practice still survives in Catholic churches, when a server ablutes the hands of the officiating priest.

Now let us see what is their fare. What strikes us is the amazing multiplicity of dishes. They were not content with one sort of fish, but would have three or

four sorts; not one joint, but several—mutton, venison, fowl of different kinds, pasties, pies, galore. Not much bread; vegetables, except cabbage, were almost unknown. Boiled barley was popular. Fruit was scarce. Dishes were not served course by course as is the custom now, but were all dumped upon the table together and eaten off the same platter. The gentlefolk drank imported wines—sack, Rhenish, Malvoisie and Muscadel. The common folk had home-brewed ale. Whisky was rarely drunk, except in the Highlands. If a gentleman wished to toast a lady he would bow towards her, raising his hat and emptying his cup to the dregs. To leave any heel-taps was bad manners.

Supper ended, the dais table was cleared and the cloth removed—diserved. Hence our term for dessert. The word is from the French and was used in Scotland a century before it found its way into England. But for this part of the meal the company adjourn to the dais-chamber, where more wine, preserved fruits and comfits are discussed. You will notice that we still distinguish between a “table spoon” and a “dessert spoon,” implying that dessert is not taken at the table where a meal is served. The dessert was also spoken of as “the banquet.” And still in Scottish newspapers which tell of social gatherings you may read that the guests were entertained to a banquet of cake and wine.

We have not noticed an important feature of the hall—the gallery. It is at the end remote from the dais, and during supper it is occupied by musicians—fiddlers, perhaps; though other instruments were common, such as the lute, the monochord, the organ and the taubron.

The ladies leave the men to continue their drinking while they themselves retire to their bowers or bedrooms. But do not suppose that their refreshments are ended. As they sit gossiping with their friends or maids before the fire, a last meal is served with a draught of wine to fortify for the night.

Now let us peep at the bedrooms. Their furnishing was meagre. You would have found precisely the same scantiness in England at this time. There may be nothing but the great, canopied bed, a chest to hold clothes, and a stool. Beside the bed is a "footgang", or "buncar," as it was alternatively called. It was simply a small, portable stairway of two or three steps to enable the would-be sleeper to climb into bed. And what a bed! It was huge, canopied, and so heavily curtained that no draught could possibly enter. It had feather mattresses, and often the four pillars supporting the canopy were crowned with plumes.

Let me tell you the story of a Highland laird who was being entertained at a Lowland castle. When he and his ghillie (from whom he was never separated, day or night) were shown into their bedroom, the laird stared at the four-poster in amazement. He had never seen one before. It seemed to him to be an arrangement of double berths and that the upper one must be meant for him. With great difficulty, therefore, he clambered to the canopy and, wrapping his plaid about him, stretched himself to sleep. Finding any sort of comfort unattainable, he looked over the side towards Donald, who was having the time of his life in the bed beneath.

"Donald, are ye all right?"

"I am that, laird."

"Man, if it wasna' for the honour o' the thing, I would come doon."

The great four-poster was for the highly honoured. For humble members of the household a truly dreadful contrivance was provided, known as the "box-bed." This was entirely enclosed by wooden shutters. It looked like a huge wardrobe with sliding panels. No light, no fresh air, could penetrate. In remote parts of Scotland these death-traps still linger.

When I was in Glasgow, a friend of mine, who lived in the slums, asked me to visit him one night. I

was shown into an empty room and asked to wait. After a time, hearing strange sounds issuing from what I supposed to be a cupboard, I opened the door and to my horror found my friend's sister asleep inside.

Before we take farewell of the castle there is one last scene which we shall witness—a wedding. In the great castle, it is true, the ceremonies might take a modified form, but, more or less, they were alike for gentle and simple. A lecture in itself might be given on the long preparations for the happy event; but here let us confine ourselves to the day. Let us assume that the bridegroom lives within reasonable distance of the bride. At an early hour his men friends assemble at his house and a procession is formed to escort him to his lady-love. A corresponding gathering conducts her, and these, uniting, proceed to the church. Immediately before the ceremony all knots about the couple's clothing are unloosed—garters, shoe-laces, strings of petticoats and so forth. These are again fastened after the service, both retiring for the purpose. Knots tied in a certain fashion were supposed to bring bad luck. To avoid this risk at the hands of malevolent persons, the marriage was sometimes celebrated in secret. The bridegroom might also protect himself by standing with shoes unloosed upon a piece of money, probably to avoid contact with the earth. After the blessing, both in England and in Scotland, the bride's garters of ribbon were unfastened by the young men present. Each would strive for possession. This, you must remember, was done in church, before the altar, and often led to violent and unseemly rioting in which the bride was thrown down.

After leaving the church, the whole company walked around the building, following the course of the sun. A race was then held from the church to the bridegroom's house, either on foot or on horseback. This was called "running the broose," and the prize was a bowl of spiced broth or brose. Later, the award was a hand-

kerchief or ribbons presented by the bride. Sometimes money was given for the purchase of a football. These sports would be indulged in by the retainers and domestics, rather than by the guests.

On entering her future home, the bride was carried over the threshold by her husband and welcomed by her mother-in-law. A feast was followed by dancing, led off by the newly wedded pair. This dance was called the "shamit reel," from its efficacy in banishing bashfulness from the bride. Well into the night the revelry would continue. But a moment comes when you see a concerted movement on the part of the bridesmaids. With make-believe stealth they approach the bride. Nobody is supposed to notice; but you may be sure everyone sees. Think of the sly glances, the suppressed smiles. Quietly they lead her away, undress her and put her to bed.

Meanwhile the bridegroom is trying to appear unconcerned. He is the next victim. His best man summons him. As he retires to his room, a general rush of all unmarried male friends is made after him. They crowd about him in merry mood. In the presence of his hilarious friends he undresses and assumes night attire. And then the whole party accompanies him to the bride's room. She, while undressing, has left on a stocking. This she now pulls off and flings amongst the onlookers, who fight for its possession. Whoever wins the souvenir is assured of good luck. Then and not till then does the company depart.

That is by no means the end of the wedding festivities; but space does not permit me to mention more.

The mists of the centuries fall again, closing our view. We are back again on the bare hill-side, with only the ruins to remind us of the scenes which once were enacted there. All the once-crowded courts are empty. No trumpet call will ever ring from these battlements again.

No beacon will flare from the tower. All the gallant warriors, glittering in their armour, the clash of which rang upon the flagstones, are gone for ever. The lovers who whispered in the evening shadows, the children whose footsteps pattered on the stairs, all have passed away. Nothing is left but the crumbling walls, and, for those of us who care to recall them, memories of the days of old. Rough and primitive they seem to us; but I think that with them have passed values we have abandoned to our loss. Mammon is the most universally worshipped of all our gods. Honours, titles; there is hardly anything that money cannot buy for us. They reserved honours and bestowed titles only for courage, loyalty or devotion. These they held to be beyond price, and rather than lose them they would be content to forfeit all else, even life itself.

Let us salute them, these ghosts of the brave old days, as they fade from our view.

Reports of Meetings for the Year 1951.

1. THE first meeting of the year proved to be a great success and quite in keeping with past seasons. On 10th May the air was, as usual, cold, coming from the north-west, but by noon, when the sun came out, members were not disappointed, and warm coats were discarded.

After assembling in cars and a bus at Ettrick Bridge, Selkirk, where some two hundred met the President, they drove for about eleven miles up the lovely valley of the Yarrow, passing the birthplace of Mungo Park. The first halt was made at the site of an ancient battle which is marked by several of the "Liberalis" stones. Here, the President, Rev. Halbert J. Boyd, made a graphic reconstruction of past history (see p. 87 *infra*).

The next point reached was Newark Castle, in the grounds of Bowhill. The speaker, Mr C. S. T. Calder, F.S.A.Scot., a member of the staff of the Royal Commission on Ancient Monuments, in his description of the Castle, showed it in quite a new light from that given previously in the *History*, since he treated it from an architect's viewpoint as well as from that of a historian (see p. 93 *infra*).

After lunch, members drove through the grounds of Bowhill, where, by the special invitation of His Grace the Duke of Buccleuch, they were conducted in two parties by Major Fox, Factor, and his assistant. It would take too long to describe in detail all the beautiful rooms, furnishings, silver, portraits, etc., but included in these last are examples of Reynolds, Gainsborough, Raeburn and Van Dyck. The scenery at "sweet Bowhill," as Sir Walter Scott called it, is always very charming, with the terraces sweeping down to the lake, but especially so on the day of the Club's visit, with a "host of golden daffodils" all around.

There followed a drive through the policies to the Ettrick entrance to Bowhill and thence members drove to the site of a Roman Fort and a Marching Camp on the rising ground above Inner Huntly. Here they were shown round by Mr R. W. Feachem, F.S.A.Scot. These remains were discovered through

an air photograph, and the work of excavation at the Fort will be carried out this year by Mr Feachem (see p. 99 *infra*).

The meeting ended with tea in the County Hotel, Selkirk, where about half the original party joined the President.

The following new members were admitted: Mr H. Drummond Gauld, F.R.S.G.S., F.S.A.Scot., Auchtermuchty; Mrs C. Pitman, Edinburgh; and Mrs E. Tait, Kelso.

2. In dull but, as has been usual during the past five years, dry weather, the Club met on 13th June at the small Northumbrian village of Edlingham in some thirty cars and a bus. The President was unable to be present, but over eighty members and their guests met the Vice-President.

The first objective was the Parish Church, where Mr J. L. Honeyman, Newcastle, gave an account of this ancient building, part of which belongs to the fourteenth century. By a footpath across a field, members walked to the Castle, where again Mr Honeyman outlined its history. Considerable care had to be taken inside the crumbling walls, but fortunately there were no accidents. Edlingham Castle was the home of Sir William Felton, Sheriff of Roxburgh Royal Burgh and Constable of Roxburgh Castle.

After lunch, members drove along the main Alnwick road, and a halt was made at a point where it crosses the site of the Devil's Causeway, elsewhere referred to as Watling Street. Here a section of the Causeway had been uncovered, and a most interesting account was sketched by Mr Lupton, who with Sir Walter Aitchison of Coupland Castle had been responsible for the original operations in 1941. The section opened shows the formation of the Roman road, while the course both north and south was traced for members across the neighbouring hollows and hill-sides.

Returning to the cars, members proceeded to Brinkburn Priory, where, after a description of this ancient building, they visited the beautiful gardens adjoining, which had been thrown open for them by Mr L. Fenwick, the owner. A delightful hour was spent in this restful corner on the River Coquet, and it seems sad to contemplate the imminent possibility that, like so many other historic places up and down the country, the family may have to part with the property for economic reasons. Some

idea of the ground covered during the day may be gauged by the speedometer of a car which read "70 miles" at the Priory.

The following new members were admitted: Mrs W. A. Carse, J.P., South Ord, and Mrs M. G. Martin, Berwick.

3. Members were again favoured with fine weather for their third meeting. This commenced with a visit to Roxburgh Castle, near Kelso, where about a hundred and twenty members arrived to meet the President, Rev. Halbert J. Boyd.

Before introducing the speaker of the day, Mr Boyd referred to the great loss which the Club had sustained by the recent deaths of two of its past office-bearers—Mr Ralph H. Dodds, Berwick, a Joint Treasurer, and the Earl of Home, a Vice-President.

Rev. P. B. Gunn, Minister of Ancrum and formerly of the modern Parish of Roxburgh, then gave an interesting talk on the origin and past history of the Castle, whose early days had been the reverse of peaceful. He was followed by Dr C. H. Hunter Blair, F.S.A., who spoke on the Wardens and Constables of Roxburgh Castle, the Castle having been the most northerly fortress ending the line of the Eastern Marches in Northumberland.

An air photograph was exhibited showing the outline of the Royal Burgh of Roxburgh, taken during the drought of 1949. On it can be seen the lines of streets, and the sites where a hospital, churches and houses had stood before the town was obliterated: now not a particle of any of these is visible on the ground.

After lunch, taken in the picturesque surroundings of the Castle, members drove to the next objective, Linton Church. Owing to the absence of negotiable bridges over Teviot, the route lay via Nisbet Bridge and Morebattle.

At Linton they were met by the minister, Rev. J. A. MacGilp, M.A., who described the various changes that had been made by periodic restorations. His most instructive talk was followed by his beadle, Mr John Darling, an expert on parish affairs and on the subject of the ancient Castle or Fortalice of the Sommervilles near by, the outlines only of which are now left. He in turn was followed by Mr J. H. Belfrage, who spoke from an architect's point of view on the Church.

Present in the Church as the guest of a member was Sir H. Blackett, Bart., Newcastle, a descendant of the family of Sommerville.

The last item of the day's meeting was a visit to the site of the Castle, whose features were explained by Mr Darling. Thereafter about half the members joined some of the office-bearers at tea in the Ednam House Hotel, Kelso, and here the following name was approved for membership: Miss Ruth Donaldson-Hudson, F.R.Hist.S., Springwood Park, Kelso.

4. In the usual fine weather now associated with their field meetings, the fourth meeting of the Club was held on Wednesday, 15th August.

Over a hundred members and their friends met the President and the Earl of Tankerville in the grounds of Chillingham. Here the party divided, one half being taken by the keeper into the policies, where they were able to get a brief view of the famous herd of wild white cattle. The other half visited the ancient Parish Church of St Peter, which Mr H. L. Honeyman described. He was followed by Dr C. H. Hunter Blair, who gave an interesting account of the famous alabaster tomb of Earl Grey. Members then walked to the Castle, where they were joined by the other party, and were conducted round the interior by the Countess of Tankerville. In the courtyard a description was given by Dr Hunter Blair.

After lunch, members drove a few miles to the small chapel of the Holy Trinity at Old Bewick. The drive was then resumed to Eglingham, where they were met by Archdeacon Forman, and where Mr Honeyman and Dr Hunter Blair described the Parish Church of St Maurice.

Amongst the cars which brought the Club, one or two were observed with a stick-on label on the windscreen, "Visitor to Britain."

The following new members were admitted: Mrs Jean Frere, Galashiels; Mrs Agnes A. Oliver, Kelso; Mrs E. M. Middlemas, Alnwick; and Miss Irene E. P. Sanderson, Alnwick.

5. The Club held its fifth meeting for the year on Thursday, 13th September, when some hundred and twenty members and guests met the President at Smailholm Tower, in

almost the forecast weather, "Showery but with bright intervals" (*for "bright" read "dull"*). Here Mr Stewart Cruden, Chief Inspector of Ancient Monuments, gave a graphic description and history of the ancient pile, explaining the why and wherefore of significant points in its construction.

After lunch, members drove to Mellerstain on the kind invitation of the Earl of Haddington, who first conducted them to a building which was the original home of his ancestress, Lady Grizel Baillie, until she built part of the present house.

After learning that this had been built at different stages, the east and west wings by William Adam in 1725 and the centre main block by his son, Robert, the party was taken round to the south side on to the terraces, where the whole range could be seen, and whence normally there is a magnificent panorama of the Cheviots. Owing to the low rain-clouds very little of this was visible. From the drive in front of the house there was pointed out an ancient clock, built into the gable of a cottage, which came originally from the clock-tower of Lauder Tolbooth; the date on the clock-face is 1735, and members could hear it strike the hour at two o'clock.

The next objective of the meeting was Hume Castle. Mr James Paterson, Architect, Berwick, gave a description of this prominent building, which stands four-square, some 710 feet above sea-level, and from which in clear weather the whole of the Merse and the surrounding hills, south, west and north, lie extended.

Explaining that the present curtain-walls are comparatively modern and that the well and central block are far older, and probably conceal much of interest if excavations were made, Mr Paterson next spoke of the "Indicator." This was erected by the Club in September 1931 as a centenary memorial to Dr Johnston, its Founder. Members were shown by Mr Paterson how to pick out any of the 129 prominent points marked on the bronze plate of the Indicator. As only a few at a time could reach it, Mr Paterson brought with him a framed photograph which they could inspect while waiting their turn. This shows a group taken at Grantshouse, on the hundredth anniversary of the Club's foundation. While many present members had not then joined the Club, he said

that they would probably recognise in it many who are still members.

At the close of all three stages of this meeting, the President referred to the talks by the speakers and in each case called for a vote of thanks, which was heartily responded to.

6. The Annual Business Meeting on 3rd October was preceded in the forenoon by a visit to the Parish Church of Berwick, where the Vicar, Rev. W. B. Hicks, M.C., M.A., gave an interesting talk on its history. About fifty members were present. Since the last visit of the Club in 1931 there have been considerable alterations and repairs to the building. After members had inspected the interior, including the marble memorial to the Founder of the Club, and had seen his grave in the churchyard, they were met by Mr L. H. Parker, who conducted them on a tour of the famous Walls. At the first point visited—above the Cowport Gate—each member received a sketch-plan of the whole system, so that Mr Parker's remarks could be followed as each point was reached. The tour ended at the south end of the town, close to the King's Arms Hotel, where lunch was provided.

The Business Meeting was held in the afternoon in the Hotel, when sixty members were present, the retiring President in the Chair. After he had read his Presidential Address: "Life in Scottish Castles in the Middle Ages," the Rev. Mr Boyd appointed as his successor, Sir Carnaby de M. Haggerston, Bart., Chathill, and handed over to him the Club's Flag. He then nominated Mr Robert G. Johnston, O.B.E., Duns, as the new Vice-President. Sir Carnaby took the Chair, and having thanked Mr Boyd for his admirable address, expressed the hope that he himself would be able to fulfil adequately his duties in the coming season, and thanked members for the great honour they had done him. Business was then proceeded with.

After four apologies for absence had been intimated by the Secretary, he read his Report for the past season, and this was duly approved by the meeting.

The Treasurers' Report was read by Mr T. Purves, and at the end he accorded his thanks to Mr Geggie, C.A., the Auditor, for his services and help. The Report, which was approved, appears on page 133 *infra*.

Mr Purves stated that a private owner had sent him a complete set of the volumes of the *History* from No. 1 to No. 29, all nicely bound, for sale. As no one present wished to buy them there was some discussion. The Secretary stated that some of the set held by him in his office were in very bad repair, and indicated that, if no other plan were adopted, he would be glad to have sufficient to take the place of these, as he was continually consulting them. Alternatively, the damaged volumes might be re-bound. The latter course was eventually agreed on, and it was left to the Council to decide about the "new-comers."

The Office-bearers having resigned, Mr Tait proposed and Mr Hastie seconded that they be re-appointed *en bloc*, and this was approved.

The following new members were admitted: Mrs M. J. Hall, Oxtou; Mrs M. J. Heggie, Kelso; Mr and Mrs Jopling, Norham; Miss W. J. Morris, Kelso; Mr N. Reid, Chirnside; and Miss E. P. L. Willins, Ayton.

A letter was read by the Secretary from Mr J. A. Thomson, F.F.A., F.R.S.E., with which he had sent in his Report as Club Delegate to the recent Meeting of the British Association in Edinburgh. After thanking the Club for appointing him as its representative, Mr Thomson mentioned that he could not promise to act as Delegate for the 1952 meeting, which is to be held in Belfast. It was therefore remitted to the Council to appoint another Delegate.

A letter was read from the Secretary, Scottish Regional Group of British Archæology, stating that the Rhind Lectures were to be given this year in Edinburgh by Professor R. E. Mortimer Wheeler, C.I.E., the title of the series being "The Discipline of Field Archæology." Members were asked to notify the Group's Secretary if they wished to attend.

Mr Buist referred to a scheme initiated by the Council of British Archæology to spread information amongst its affiliated bodies as to interesting archæological work carried out by those bodies. The scheme is that societies should supply "off-prints" of such activities, which would be purchased by other societies through the Council of British Archæology. Since, however, all the cost of these off-prints would have to be borne by the societies themselves (until reduced or offset through sales) Mr Buist was

of opinion that the Club could not, meantime, afford any expense of this kind.

Rev. Mr Duggan, Duns, put forward his views on the question of the Club subscription. He proposed that, where in the same family there are persons other than the member, these should be allowed to join as "Associate Members" at a reduced subscription of 10s., but without power to vote, or to receive the *History* and the field notices. He also suggested that "old" (in terms of admission date) members who have dropped out since the subscription was raised should be allowed to resume membership at a reduced rate. When he was reminded that they could continue at meetings as guests of a member, Mr Duggan asked if it were not the case that the limit was one guest per member. Mr Purves referred him to Rule 14: the clause reads "guests." After further discussion, Mr Hastie proposed and Mr Middlemas and Captain Tate seconded, that the matter be remitted to the Council.

Mr Buist asked that the subscription be continued at £1, and pointed out that the present costs of printing the *History*, and printing costs generally, were still very heavy, and unlikely to get any lower. This also was remitted to the Council.

The President suggested, as a means of increasing the funds, that members should try to interest as many young people as possible in the objects of the Club.

This was all the business and, after a vote of thanks to the Chairman, members dispersed for tea.

Secretary's Report—1951.

In the past season good weather, as usual, was enjoyed at all the field meetings except that in September, but even at it, as the rain had begun before members left home, they came prepared for the worse and got the better. Considering that since 1946 there has been only one other not-quite-dry day, there seems little cause to grumble. This year there has been an extra field meeting—to-day's half-day: as it had not taken place when this Report was made up, I just mention it for the "Record." The attendances were above the average for the last five years, the greatest this year being over two hundred in May and the smallest eighty in June; in July and September

about a hundred and twenty each, and over a hundred in August. It is difficult, however, to put down exact numbers at any given time, as, nowadays, members seem not only to "cut-out" during the meeting, but also to "drift-in" after the start. In both May and June some members misread the gathering point, and landed at first in places somewhat similar in name but miles distant.

This cutting-out is rather to be deplored, especially when done during the driving, as, on more than one occasion, cars behind have followed the "deserter" when the leader was out of sight. It would be better if "deserters" would let me know their intention, so that I could arrange matters. I may say that one or two did tell me. There has also been a tendency to drive ahead to the next point in the programme without waiting for the main party. Why, I don't quite know, as it is impossible to hear anything until the speaker has arrived. A small item that might be noted is that when a member brings guests, these should be either in the member's car or the member should go in the guests' car. At one meeting there were cars containing only guests, and of course they could not know the procedure.

Since the last General Meeting there have been comparatively few losses in membership by death: a few members have resigned on leaving the district or on marriage: against them there have been several additions. The Roll is now 342 plus to-day's seven proposals.

Three deaths that are very much regretted are those of Mr Dodds, Lord Home, and Professor Watson.

Ralph H. Dodds was Treasurer of the Club for very many years. He was admitted a member in 1903 and became Treasurer in 1920, but resigned office in 1948 owing to ill-health. Besides his unremitting activities in that office, he was responsible for the erection in 1933 of the Memorial Stone commemorating the Battle of Halidon Hill in 1333, the "Indicator" at Hume Castle in the Club's Centenary Year, and Sybil's Well at Flodden, as well as for numerous other efforts for the Club's welfare.

My own first recollection of Mr Dodds, other than that he was the Treasurer, was on a very warm day. My wife and I were walking back to the cars when he joined us. After some

remarks on the weather, he handed to her a small silver snuff-box—containing “thirst-quenchers.” After I became Secretary in 1939, I saw quite a lot of Mr Dodds, as the Council Meetings were held in his house. During the War, and especially after he had had a slight shock, he was very solicitous about my wife’s illness, which was similar to his own.

The death of the Right Honourable the Earl of Home was also a great loss. Admitted a member in 1915, he was nominated as Vice-President in 1947, but in the following year was compelled to retire from this position, when also he had to give up most of his public offices on account of ill-health. Lord Home was a very courteous member: prior to each meeting, field or otherwise, he always sent me an apology for absence.

The third death is that of Professor George Watson, F.S.A.Scot. He was quite a young member of the Club as dates of admission go, but already he had made several literary contributions to the *History*. In the current issue members can read an “Appreciation” of his life.

Lastly, as the Club’s silk Flag, flown on his car by the President of each year, has suffered from hard work—or rather hard fluttering—it was decided that one of stouter material should be provided. This was duly done. But as it is sometimes difficult in a string of thirty to forty or more cars to see where the leader’s car is—so as not to bypass it (Rule 6, “Pink Slip”): and also, as both the President and his Flag might, on occasion, be absent from a meeting, it was decided that the Secretary’s car also should bear some distinguishing mark, but one that would not be confused with the President’s Flag if both were present. After some thought the Treasurers produced what they termed a “Pennon.” Before writing out this Report, I confirmed the proper designation, *i.e.* “Pen-non” or “Pen-nant,” lest some would-be pundit might trip me up. The former is correct, as *Chambers’s Dictionary* states that a “Pennon” is a long narrow flag, and a “Pennant” one many times longer than it is wide—in short, a “streamer.”

The badge and initials of the Club on both Flag and Pennon were hand-worked by a lady member in Berwick. The Pennon was first used at the September meeting, and I think members will agree that it looks very nice!

THE STANDING STONES OF YARROW.

By Rev. HALBERT J. BOYD.

How are we to account for the melancholy which in earlier times was associated with the valley of the Yarrow, as with no other Border river? Perhaps the landscape then had something to do with it, for not always had it the wide, open spaces of to-day. The forest which once clothed these hill-sides must have been dense and forbidding. Says the ballad of the outlaw Murray:

“They saw the dark forest them before,
They thought it awesome for to see.”

But there is, perhaps, more than that. Is it too fantastic to believe that tragedy in human lives sometimes steepes the very scene of its enactment, so that it becomes a haunt of sadness, communicated to others who enter it? Certainly it might have seemed so here. And in this haugh—these Dowie Dens—we are at the very heart of it; for all around us tragedy followed tragedy through the ages, right back to a time so distant that little trace of it has been left, when these hills around us witnessed the last struggles of a dying race against overwhelming odds.

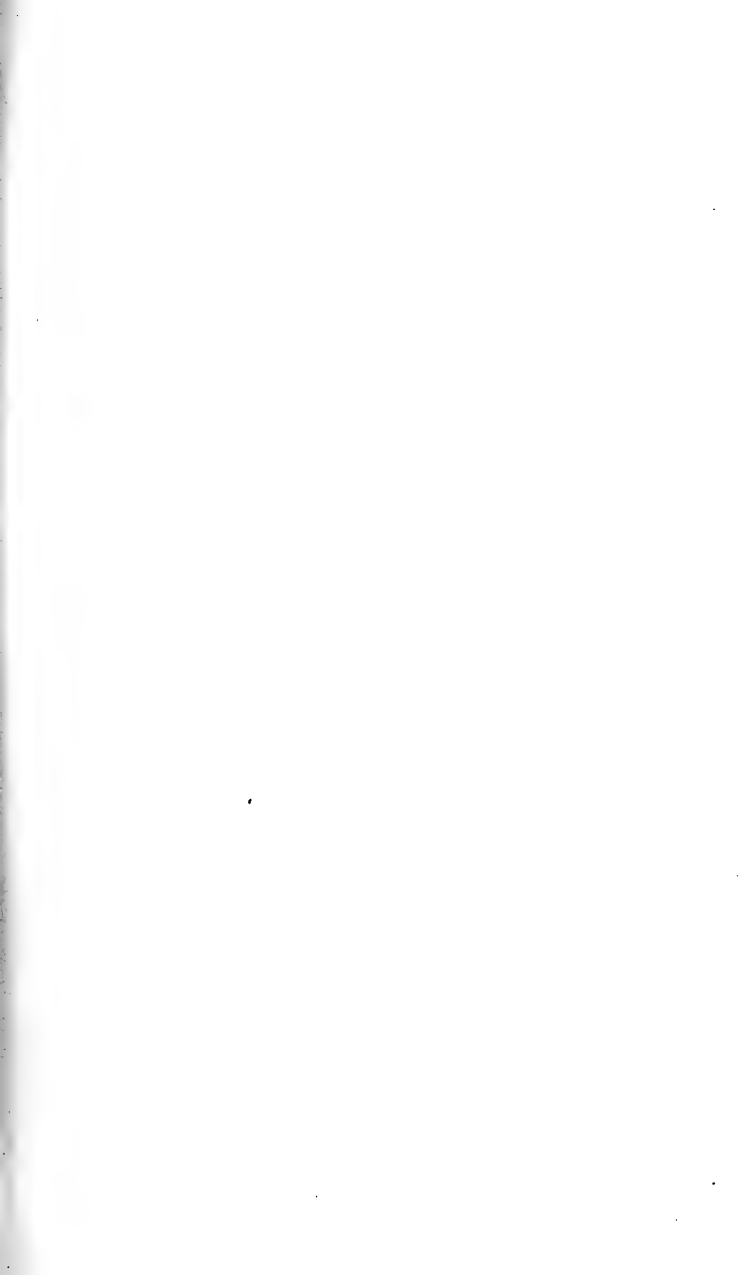
The meadow on which we stand was, without doubt, the scene of a battle of the Cymri, a race which has left behind it few records. On the stone which you have just seen is their earliest and almost only extant written inscription; but the names they gave to many Border hills and rivers are still used by us to-day. And those of places around us here furnish evidence that a battle was fought by them upon these fields. *Cat* is a Cymric word meaning “battle,” and the hill to the east is *Catcraig*. *Catslack Burn* lies to the west; near it is *Cat Hole*, and the *Catrail* runs along the hill-side to the north. Further proofs of a contest are in abundance. In the beginning of last century not only were there three standing stones, but

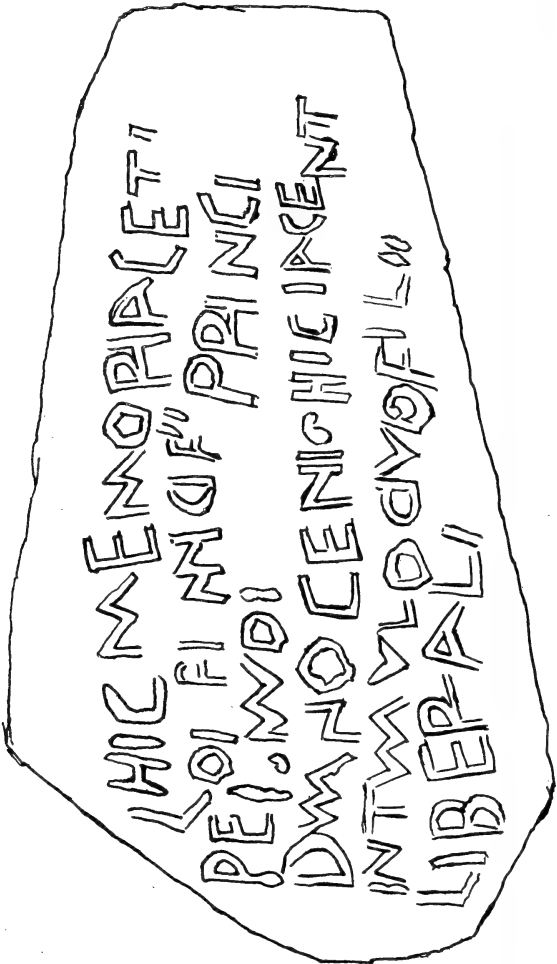
twenty tumuli, or memorial cairns, were scattered over this haugh. Agriculture was then booming, and it was thought of more importance that this field should be broken up and wretched crops produced than that these relics of inestimable interest should be preserved. The cairns were, therefore, removed. Beneath them were found yellow dust and a few crumbling human bones which were used as fertilisers on what is now the minister's glebe. Later still—that is to say, about forty or fifty years ago—the Border artist, the late Tom Scott, also found in the adjoining haugh, beneath the surface, quantities of human bones. The name of the river valley near is “The Dead Lake.” And what more likely than that that name commemorates the pitching in of the bodies of the slain? The ploughing had one redeeming reward: a recumbent stone was unearthed—the inscribed stone which you have seen. The lettering has been deciphered with difficulty. But of that I shall speak later. The Rev. Dr Kirkpatrick, the late minister of Yarrow, has an interesting theory: that these stones, four now in number, may have been standing at the time of which I speak, and that this monolith was uprooted by the contestants and used for the purpose of this inscription.

Who were these Cymri, these early Britains? Where did they come from? What did they look like? What was their dress, their manner of life, here amongst the hills and valleys of the Border? It has interested me to find the answer to these questions, and so I hope that, if I pass on my information, I may interest you too.

Cæsar, in the year 57 B.C., found them peopling Britain as long-established inhabitants; but they were originally immigrants from the Continent.

Josephus, the Jewish historian, refers to them, and held that they were the Galatians of Northern Phrygia. He traces what, no doubt, is their mythical descent from Gomer, the eldest son of Japhet, the son of Noah. They were of Celtic stock, Scythians who inhabited the regions near the Black Sea, but were driven out. Their hordes drifted over Europe. In three great impulses of invasion they seem to have crossed the North Sea and English Channel to our land. There were four passages from Gaul to Britain—from the mouths of the Garonne, the Loire, the Seine and the Rhine. I think it must have been





BLACK AND WHITE DRAWING OF INSCRIPTION ON "LIBERALIS" STONE.

from the first of these, the Garonne, that the Cymric tribe which peopled this valley came. Garonne is a corruption of the Cymric word *Garow*, meaning "turbulent." Perhaps when their scouts first penetrated this valley the river was in flood, reminding them of that which they had left; and so they named it, too, *Garow* (Yarrow).

The tribe which inhabited this neighbourhood was that of the Gadeni. Eastward were the Otadeni, and to the north-west were the Dumnonii. The Gadeni also settled in Cornwall. Strange that at one time two sections of a tribe lived in regions so far apart! No doubt during the Roman occupation of this area, dominated as the Cymri must have been by the great Roman outpost of Trimontium, they would become, at least to some extent, Romanised. Numbers of them must have learned to speak Latin, as the inscription on the Yarrow stone testifies. The *Pax Romana*, too, would be imposed upon the whole land, and its people would rely upon their conquerors for protection. But, with the withdrawal of the Legions in A.D. 410, the tribes would be exposed to their enemies and thrown on their own resources. Their chief opponents were the invading Danes and Angles, and by them they were, little by little, pressed back upon the west coast; though still they formed an unbroken chain from Cornwall to the Clyde.

In the year 573 Rydderich Hael ("the liberal"), a king of a northern tribe of Cymri, was converted to Christianity by St Kentigern, or Mungo, in consequence of which war was declared upon him by his pagan fellow-countrymen under Gwenddeleu. In two subsequent battles, one of which was at Arderydd, in Liddesdale, the pagans were defeated and the whole of Strathclyde passed under Rydderich's sway.

At this point I think it would be convenient to return to the inscription on the Yarrow standing stone. The inscription has been translated as follows:

"Here is the monument of Cetilous and Nenus, sons of Nudd, Dumnonian prince and emperor. Here lie buried the two sons of Liberalis."

If that be correct, then it almost certainly refers to Rydderich Hael, who, according to Professor Cooper of Glasgow, was also known as Nudd. The soubriquet in the word "Liberalis" seems to confirm this conclusion. With other theories I need not

trouble you. If we accept Professor Cooper's interpretation, we have here the scene of one of the two battles which established Christianity in the Kingdom of Strathclyde and without which Scotland might never have become a distinct nation.

In the year 607, Aethelfrith, King of Northumbria, defeated the Cymri at Chester so completely that he was able to divide the nation, driving a wedge from Cumberland (the land of the Cymri) to Wales. The northern Kingdom of Strathclyde was thus isolated. It extended from Cumberland to the Clyde.

We have no time to follow the fortunes of its harassed people. It was to their rescue that Arthur came, a Cymric leader, around whom romance and legend have woven their mythical glamour. The Cymri of Strathclyde were assailed from all quarters: from the south and east by the Angles; from the south and west by the Picts and Scots. Gradually driven backward, they have left to us to-day in the old hill-forts of the Borders, and in the Catrail, evidences of the desperate efforts they made to preserve their lives and independence, knowing well that defeat meant massacre or slavery.

Just a few words as to their subsequent history. In the year 890 a vast crowd of them determined to escape from their hardships and set out accordingly to join their kinsfolk in Wales. They fought their way there and founded a new and more peaceful home which they named Stradeluid (Strathclyde) in memory of their Border kingdom.

Donal, who reigned at the beginning of the tenth century, was the last Cymric King of Strathclyde. His son, Donal, died in Rome as a pilgrim. Strathclyde became incorporated with the Kingdom of Scotland. But for long the inhabitants bore their Cymric name: they were known as Wealas or Walenses (Welshmen). Many proper names associated with the Borders prove that the old Cymric strain still lingers. Welsh, a corruption of Walenses, was until recently a frequent surname in Tweedsmuir. Wallace has the same derivation. Ker, Cymric for "fort," probably originated the surname. My own name is purely Cymric.

Now let us see if we can gain a closer glimpse of these people who lived so long ago. Most of us have often stood within the crumbling mounds of their hill-forts. As a boy I used to try to imagine the defenders of them. I have learned that they

were far more civilised than I had supposed. To begin with, these forts were not their dwelling places, but only strongholds to which they could flee in the event of attack.

What, then, did they live in? If you prowls about these hills and valleys, you will find countless traces of their habitations, though the dwellings have long since disappeared. They dug a hole and ranged around it vertical timbers tied together by thick ropes. Wickerwork—at which they were extremely expert—was interwoven. The whole was then plastered with clay. Converging beams supported a roof heavily thatched with brushwood, heather or rushes. Grease mingled with sand or clay was used to stop the interstices.

See them feasting together in times of peace. They were mostly fair-haired, and even their men wore their hair long and combed back to the shoulders. Only the leaders grew moustaches. Others, for the most part, were bearded. Men had three principal garments—the *braccae*, or trousers, the tunic and the cloak. The trousers were fairly close-fitting and reached to the ankle. They were an object of ridicule to the Romans, whose tight-fitting breeches ended just below the knee. The tunic opened down the front. And the cloak was of thick, coarse wool.

They dined sitting on the ground on skins of the wolf or dog. Youths and women served the men. Near by were fires with kettles and spits on which whole carcasses were roasted. The best portions were carried to the most distinguished persons present. They invited strangers to the repast and only when they had eaten were they asked who they were and what they wanted. They would arise from the feast and fight with one another on the least provocation. They were fond of milk and flesh of all kinds, particularly that of swine.

Their pre-Christian religious rites were terrible. Let me give you one example. Priestesses followed the army, dressed in white linen cloaks buckled around them with brazen girdles. They walked barefoot. Sword in hand, they met the prisoners who had been taken in battle, and, having crowned them with garlands, led them to a huge cauldron raised so high that it had to be approached by steps. By the side stood a priestess who slit the throat of each prisoner as he in turn was forced up the steps. From the collected blood in the cauldron divination

was drawn. Other equally cruel and dreadful practices they had, all of which would, of course, be abandoned when Christianity was adopted.

Let us now try to picture something of the battle fought upon these meadows. Even in those days they must have been clear of trees; but all around, straggling up the hill-sides and choking the valleys, would stretch the great forest of Ettrick. The Yarrow did not then flow in a continuous channel as now, but as a succession of streams connecting a chain of marshy lakes. Note again the name of "The Dead Lake," given to the haugh southward of this spot.

News of the approaching enemy would be signalled, probably by beacon smoke and flame. And so by the palisaded trench of the Catrail the Cymric warriors from far and near would assemble. They carried oblong shields, not so large as those of the Romans; but from these conquerors they had learned to discard the long, pointless sword which their ancestors used to carry and had adopted a short, two-edged and pointed weapon. Javelins, too, they carried and could hurl them thirty yards. Bows and arrows would complete their equipment. They had been wont to fight in chariots; but it is doubtful whether, in country such as this, these vehicles could be used. You can imagine the defending force drawn up here, awaiting the approach of their enemies till at length the glitter of arms seen through the tangle of trees would warn them that the Angle host had forced a way through the forest.

At length the opposing armies would face each other. But before the general onset a Cymric champion would rush forward, challenging the most redoubtable of his enemies to meet him in single combat. He chants an account of his own achievements in war and those of his ancestors. He reviles his opponents, seeking to intimidate them. Should victory reward him, he will cut off his enemy's head and keep it as a treasured trophy.

How did the battle go? If victory was indeed gained by Nudd Hael, it was dearly bought by the death of his sons. Perhaps it was to solace the father in his grief that a kindly hand cut that rude lettering, honouring the slain. All have passed away, leaving only the spirit of melancholy to haunt the valley.

NOTES ON NEWARK CASTLE.

By C. S. T. CALDER, A.R.I.A.S., F.S.A.Scot.

As well as the tower beside which we have gathered, there are three other castles in Scotland bearing the name of Newark. The appellation simply means the "New Work," in distinction from an "Old Work" (Auldwork), and implies that an earlier building must have stood at or near the spot.

The implication that an earlier building existed here may be regarded as certain, though no vestiges now remain for identification. At least the site of an "Oldworck," by that name, is indicated on a map made by Timothy Pont about the year 1602. He places it about half a mile eastwards from this tower but, according to local tradition, its position is imagined to be half a mile to the south-east, on the banks of the Newark Burn about its confluence with the Yarrow Water. On Pont's map there also occurs the term "Castel of Newoorck."¹

Whatever the type and character of the "Old Work," its successor is an austere massive block of random rubble masonry practically devoid of ornamentation and now shorn of much of the little it had in the tearing-out, in the eighteenth century, of many of the dressed freestone jambs of the doors, windows and fireplaces. Its simplicity, however, is in keeping with the fashionable style of the domestic defensive construction of the fifteenth century, to which period the tower mainly belongs. Though on a somewhat larger scale, it follows the lines of the simple keeps introduced in the fourteenth century, when the country was in an impoverished condition following the struggle for national independence, and extensive building operations could not well be afforded. Towers of this description are strong and economical, and give good accommodation in their great height under a single roof.

This high towering style of building was carried on through the sixteenth and into the seventeenth centuries, though with

¹ Blean, *Theatrum Orbis Terrarum*, v. "Teviota."

more elaboration in detail and with the addition of wings, and, according to the number and position of the wings, formed the later L- or Z-shaped plans. Even in the still later quadrangular plans, the high block was retained as a conspicuous feature, whether as a nucleus in later expansion or as part of the design of a new courtyard plan as a whole.

Newark Castle is first recorded in a Charter of Archibald, Earl of Douglas, in the year 1423, and between 1432 and 1446 it is again mentioned as the residence of the Earls of Douglas. The date 1423 may be unhesitatingly accepted as the date or near date of the erection of the tower, and that would fully agree with the structural details of the fabric. But that date applies only to the lower part, up to a height between the first and second floors. For the upper stages there is evidence to suggest a big alteration and re-building in the latter half of the same century. The character of the masonry and quoin-stones is different to that below; there is a thinning of the side walls, and an entirely new kitchen fireplace has been inserted at the western end of the hall. The fireplace closes earlier voids and encroaches on a mural chamber at its southern end.

In support of the structural evidences, it is on record that extensive repairs were carried out in 1467 by Sir Thomas Joffray,¹ and eleven years later, in 1478, Patrick de Moravia (or Murray) built a new chimney, probably that of the kitchen just mentioned. It is extremely likely, therefore, that the alterations and rebuilding of the upper portion coincide with these dates. Furthermore, it was at this time—actually in 1473—that James III granted to his Queen, Margaret of Denmark, the lordship of the Forest of Ettrick. Hence, presumably in association with these late fifteenth-century operations, there is displayed on the west gable above the first-floor level an armorial panel bearing the Royal Arms of Scotland. The shield, supported by two unicorns, is charged within a tressure a lion rampant and is surmounted by a crown over which there appears to be an angel's head. After the Queen's death, Newark was placed in the hands of keepers, Lord Hume and his son Alexander.

The superstructure (that is, above the wall-heads and including the cape-houses) is not earlier than the sixteenth century,

¹ Exchequer Rolls, vii, 1460-9, pp. 452, 477, 498, 501.

and in the last quarter of the seventeenth century, probably when Anne, Duchess of Buccleuch, was in occupation, some minor alterations were made on the tower. These were mainly confined to the openings, which were enlarged, and it will be noticed that the windows of this period have back-set margins, while those of the earlier work are heavily chamfered. The back-set margins would indicate that the stonework at this time has been harled, and traces of harling can still be seen on the walling next to the door of the basement.

The tower, which is the largest in the county, measures 65 feet by 40 feet over walls 10 feet thick in the lower portion, reducing to $6\frac{1}{2}$ feet thick above. Including an entresol in the basement and an attic, the tower rose to a height of six storeys and there was a garret in the roof.

In the north wall at ground-level the existing entrance, with its bolection-moulded architrave, is an insertion of seventeenth-century date like the upper windows, but it may replace an original entrance from the outside direct to the basement. Above it, on the level of the first floor, the principal entrance, now renewed, led into the hall, and evidently had been reached by a movable ladder, as was customary. A double-checking of the rybats and voussiors shows it had been furnished with two doors, the inner maybe a stout oaken door, and the outer an iron grille or yett.

The basement, occupying the whole extent of the tower, is finished with a barrel-vault, and rough corbels, projecting from the side walls to support the runners and joists of a wooden floor, evidence a subdivision into two apartments in the height. The lower floor, lit by a widely-embrasured window-slit in each gable and in the south wall, would be used for storage, but the upper seems to have been a habitable entresol, as the two windows whereby it is lit have been provided with seats in the jambs, and there is a fireplace in the east gable. The mullioned double window in its north side represents a later widening and insertion.

A straight flight of steps in the thickness of the wall rises westwards from the ground-floor lobby to a plat from which the entresol has been entered, and from which a turnpike stair in the north-west angle begins to ascend. Another turnpike has started in the diagonally-opposite corner of the entresol,

but is now completely ruinous. Both stairs rise to parapet-level and are covered by cape-houses. The stairs, *en route*, gave access to the various floors, which, however, have now disappeared.

By the provision of two stairs a certain degree of privacy may have been contemplated. On all floors above the hall there has been a subdivision into two or more rooms, in some, if not all, of which there were probably no intercommunicating doors for through-contact between the east and west portions of the tower. Thus with one of the staircases earmarked more or less for the sole use of the laird and his family to reach solar or sleeping apartments, they would be entirely separated from those of their staff and retinue and enjoy the privacy afforded.

Opening off the north-west turnpike, a short, straight flight of steps rises to connect with the lobby of the hall, and from the lobby in an eastward direction there branches off a vaulted mural chamber which no doubt served as a porter's lodge. The hall, which was the centre of the usual activities of the castle, was here a spacious room originally running the whole length of the building, but in the arrangement of the subsequent alterations its length was curtailed by eight feet at the western end, where this space was cut off and separated by screens from the hall to provide a new kitchen, which may have taken the place of an earlier one outside in the courtyard. The lighting of the hall was gained through two fair-sized stone-seated windows in the south wall, and a large recess in each side wall may have been formerly a mural chamber, while a much-restored fireplace survives in the east gable. The kitchen, which entered separately from the turnpike, depended for light upon a small square window set high up in the north wall, and the fireplace, which has had its arch and jambs renewed in modern times, is of large dimensions and occupies nearly the whole of the west side. In the north side of the fireplace has been an aumbry, and on the south there is the remnant of an earlier mural chamber.

Each of the second and third floors has been subdivided into two apartments, well lit by windows, some of which have been enlarged in the seventeenth century. Each of these rooms has had a fireplace either in the side wall or in the gable, and the

one in the east room has been large and ornate, but only the base of a moulded jamb is left. All have been provided with mural chambers and, with the exception of one of the chambers, each has had its own garde-robe. In castles of this period mural chambers are numerous, and almost honeycomb the walls.

The fourth floor was an attic at parapet-level, but seems to have been divided into three chambers. Light would be admitted by dormer windows, but none have survived.

Above that, in the space of the main roof, was the garret, evidently habitable, from the fact of a fireplace remaining in the west gable.

The parapet is only slightly off-set from the face of the walls by rude corbelling, and the walk is carried round all sides of the tower. The battlements would be a main point of defence, and instead of cape-houses, the original parapet may have extended at the angles into open circular bartisans.

Towers of this type were generally surrounded by a high curtain-wall or barmkin to enclose a courtyard, in which there would be various erections mostly built against the curtain as lean-to structures. These would include stabling, a kitchen and other offices, and in time of danger the courtyard might also hold a local population and cattle. The barmkin here is in a very dilapidated condition, and has been broken through on the east and west in the process of making one of the drives to Bowhill House, the seat of the Dukes of Buccleuch. It still attains a height of eleven feet where best preserved, and it is five feet in thickness though not contemporary with the tower. The provision of a barmkin gave considerable additional security by protecting the keep from sudden assault, and in its defence a row of oval shot-holes has been constructed on all sides, except on the north, where the steep-sloping banks of the Yarrow may have been deemed sufficiently strong protection in themselves. From the appearance and type of shot-holes the barmkin cannot be assigned to a period earlier than the beginning of the sixteenth century.

The entrance to the courtyard is now much destroyed, and the opening built up. It has been contained in a projection on the west, and on the south and east respectively a rectangular tower projects. In each of these structures shot-holes have been formed in a position to enfilade the wall. The smaller tower on

the south side has been two storeys in height, and the lower storey contains a garde-robe. The eastern has had more than one floor, but the arrangement is uncertain. It may have been an early kitchen.

It is recorded that, in 1547, the castle was besieged by the English under Lord Gray of Wilton, who entered the "barbacanne" and burnt the stables, but found the house not "pregnable" without ordnance.

In 1645 one hundred prisoners taken on the field of Philiphaugh, which lies about three miles to the east, were shot within the courtyard, and in 1650 the castle was occupied by Cromwell's troops.

The Barons of Buccleuch were the Captains of Newark from an early date. Anne, Duchess of Monmouth and Buccleuch, wife of the famous Duke of Monmouth who was beheaded in the reign of James II and VII (1685-1689), resided here after the death of the Duke. It was during her time here that Sir Walter Scott introduces the "Last Minstrel," and makes him sing his mournful lay.

ROMAN FORT IN SELKIRKSHIRE: RECENT EXCAVATIONS.

By R. W. FEACHEM, M.A., F.S.A.Scot.

IN February 1949, in the course of a survey of the ancient monuments of Selkirkshire then being made by the Royal Commission on the Ancient and Historical Monuments of Scotland, a Roman fort was discovered near Oakwood, about four miles from Selkirk. During June and July of this year excavations were carried out at the site by the Commission, with generous support from the Society of Antiquaries of Scotland and the Christianbury Trust, the work being under the direction of Dr K. A. Steer, F.S.A.

The fort is situated on the east side of the Ettrick Valley, ten miles south-west of the great Roman station at Newstead, but does not appear to lie either on the route which is presumed to have run thence along the Tweed to the station at Lyne, or on another, which must have approached the fort at Raeburnfoot, in Upper Eskdale, by way of Craik Cross. Excavation revealed that the main gate of the fort faces toward Newstead, and that the fort was built during the campaign of Agricola in the early eighties of the first century A.D.

The defences, which enclose an area about 380 feet square, consist of a turf rampart, outside of which run two ditches. The rampart would originally have been about twelve feet in height, and surmounted by a walk for sentries, but it has been considerably reduced by erosion and by the effects of cultivation. The whole course of the defences was traced, together with that of the bank and ditch which enclose an annexe lying on the south side of the fort.

When the outline plan had been proved, excavation was started at one of the four entrances to the fort. The entrance was found to be of a type of which only one other example is known in Roman Britain, that at a Trajanic fort at Haltwhistle Burn, on Hadrian's Wall. The rampart turns inwards on either

side of the entrance, so that the gates were placed at the narrow, inner extremity of a funnel-shaped court; both the halves of the gateway, each of which would have been fitted with a pair of stout, wooden doors, are nine feet six inches in width.

The lower end of the central gatepost, which supported the inner leaves of the doors, was found *in situ*; it is an oak post, dressed to a roughly square section, and is the only known example from a Roman fort in Britain. Other finds from the Agricolan occupation include a coin of Vespasian and various pieces of pottery. Cultivation of the field in which the fort lies has removed all traces of the foundations of the internal buildings.

A second occupation, which took place later in the first century A.D., was discovered during the excavation of the entrance. Half the width of the gateway had been blocked by a stone wall, while the funnel-shaped court had been reduced in width by a clay rampart, founded on cobbles. This clay rampart had been extended as a fairing about eight feet in width along the outer face of the old turf rampart. Finds from this second occupation included pottery and a bead. All the finds will eventually be displayed at the National Museum of Antiquities of Scotland.

A Roman temporary camp was also discovered in 1949, lying close to the fort. It was possibly occupied by the builders of the fort during the initial construction. The north side of the camp is 1000 feet in length; the entrance, placed half-way along it, is protected by the double *clavicula* system, the only known comparison with which is to be seen at a similar structure at Cawthorne, in Yorkshire. Excavation through the defences of this camp showed that they originally consisted of a turf bank with an external ditch.

The excavations were carried out by a force of twelve, which included students from Edinburgh, Glasgow and Durham Universities, and certain voluntary helpers, some of whom had had previous experience of excavation at Roman sites.

Note.—This article is reproduced by courtesy of the Author and the Editor of the *Scotsman*, in which it first appeared.

NOTES ON SMAILHOLM TOWER.

By J. A. THOMSON, F.F.A., F.R.S.E.

It was thought that it might add to the interest of to-day's meeting if a few notes were given on points that did not come within the scope of Mr Cruden's address.

Members would no doubt be interested to hear something of previous visits paid by the Club to this memorable site. There seem to have been four. The first I find recorded took place in July 1834—a hundred and seventeen years ago—and in his review of the doings of the Club during the session in which that occurred, the President of the day, while regretting that he had been unable to be present, is reported as having said that “a lovely day and an interesting excursion, in a district rendered classical by the magic pen of Sir Walter Scott, appears to have given unalloyed satisfaction to the assembled members of the Club, and to their visitors from the Tweedside Physical and Antiquarian Society.” “The principal object of the excursion,” it is added, “was the examination of Whiterig Bog, remarkable for its extensive deposit of shell-marl, used by the agriculturists as a manure or alkaline corrective.” The Tower came in as a secondary objective, along with the “botanical treasures of the morass” (*History*, vol. i, p. 37).

The next visit took place in 1893, again in the month of July, when Stichill, Newton Don and Hume Castle were included in the programme. From the record of that occasion (*History*, vol. xiv, p. 234) we learn that the farmhouse, in which Sir Walter Scott stayed with his grandparents, was a building of one storey with an attic, and thatched: but that it no longer existed. We learn also that Wranghame, situated near by, and traditionally associated with the early years of St Cuthbert, was no longer visible. The name, however, still appears on the map. On the occasion of the 1893 excursion, the Club breakfasted and dined at the Queen's Head Hotel in Kelso.

In volume xx of the *History* there is printed: “A Visit to

Tweedside in 1833, being the Journal of John Trotter Brockett, the Younger, of Newcastle." In it there are brief references to the Tower and the farm, with rough sketches of them.

The third visit, when Bemersyde was conjoined with Smailholm, took place on 18th September 1912. The similarity between the two towers was noted, and the remark made that both had been built in pursuance of the policy of James V to increase the number of strongholds on the Border, "by requiring every proprietor of an hundred pound land of valuation to build such a place of defence." Among those present on the occasion of that visit I find the name of one of our members, still active, Mr R. G. Johnston.

On the fourth visit, on 15th September 1927, Hume was, as on to-day's occasion, joined with Smailholm. The attendance reported—155 members and friends—is stated to have been a record. The list of those present includes the names of several members who are still, happily, with us.

It is, of course, from its association with the life of Scott, and the influence it had on the development of his genius, that the Tower—apart from its solitary and striking grandeur—derives so much of its interest. Sir Walter himself has left us in no doubt about this. The lines that occur in the Introduction to Canto Third of "Marmion" are familiar enough, but I make no apology for repeating them:

"Yet was poetic impulse given,
By the green hill and clear blue heaven.
It was a barren scene, and wild,
Where naked cliffs were rudely piled;
But ever and anon between
Lay velvet tufts of loveliest green;
And well the lonely infant knew
Recesses where the wall-flower grew,
And honeysuckle loved to crawl
Up the low crag and ruin'd wall.
I deem'd such nooks the sweetest shade
The sun in all its round survey'd;
And still I thought that shatter'd tower
The mightiest work of human power;
And marvell'd as the aged hind
With some strange tale bewitch'd my mind,
Of foragers, who, with headlong force,
Down from that strength had spur'd their horse,

Their southern rapine to renew,
 Far in the distant Cheviots blue,
 And, home returning, fill'd the hall
 With revel, wassel-rout, and brawl.
 Methought that still with trump and clang,
 The gateway's broken arches rang;
 Methought grim features, seam'd with scars,
 Glared through the windows' rusty bars."

As a child he had been threatened with what would seem to have been the disease so often mentioned in our own day with dread, namely, infantile paralysis; and his parents, bereaved as they had so sadly and so often been (they lost six children, in infancy, out of twelve), decided to send him to Sandyknowe, where, under the care of the good folks there, he would have the benefit of the clean, sweet air of the ancestral countryside, instead of the unsavoury atmosphere of eighteenth-century Edinburgh; a decision which proved of extraordinary importance, for not only did the child win health and strength, he also, all unconsciously, laid the foundations of his marvellous knowledge of country folks and country ways, and had his imagination kindled and fed upon the local legends and ballads of the region of which it has been said that "every field has its battle, and every rivulet its song."

It is a pleasant fancy to link this happy childhood with the youthful experience of St Cuthbert, who, while tending his sheep on a Lammermuir hillside, had the vision of angels that determined him on taking to the religious life.

In one of his first attempts at original ballad-writing Scott made use of the Tower and its surroundings for the setting of "The Eve of St John," albeit he acknowledges (in the introductory notes in the *Minstrelsy*) that the catastrophe of the tale is founded upon a well-known Irish tradition.

"The Baron of Smayho'me rose with day,
 He spurred his courser on,
 Without stop or stay, down the rocky way
 That leads to Brotherstone.

"He went not with the bold Buccleuch,
 His banner broad to rear;
 He went now 'gainst the English yew,
 To lift the Scottish spear.

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"The baron returned in three days' space,
 And his looks were sad and sour;
 And weary was his courser's pace
 As he reached his rocky tower.

"He came not from where Ancram Moor
 Ran red with English blood:
 Where the Douglas true, and the bold Buccleuch,
 'Gainst keen Lord Evers stood.

"He lighted at the Chapellage,
 He held him close and still,
 And he whistled thrice for his little foot-page,
 His name was English Will.

"That lady sat in mournful mood;
 Looked over hill and vale;
 O'er Tweed's fair flood, and Mertoun's wood,
 And all down Teviotdale.

"Now hail, now hail, thou lady bright!—
 'Now hail, thou Baron true!
 What news, what news from Ancram fight?
 What news from the bold Buccleuch?'

"The Ancram Moor is red with gore,
 For many a Southron fell;
 And Buccleuch has charged us, ever more
 To watch our beacons well."

And so to the stark climax. Not a pretty story; but the Minstrel was soon to strike out a mightier music: the "Lay" and "Marmion" following within the next few years.

Scott's affection for Sandyknowe and the Tower was a permanent one; a visit to it was an annual event with him, and here he brought many of his friends and visitors. Writing from Kelso to his mother in 1788—he was then a lad of seventeen—he says: "I have been very happy for this fortnight: we had some plan or other for every day. Last week my uncle, my cousin William and I rode to Smailholm, and from thence walked to Sandyknowe Craigs where we spent the whole day, and made a very hearty dinner by the side of the Orderlaw Well, on some cold beef and bread and cheese; we had also a small case-bottle of rum to make grog with, which we drank to the Sandyknowe Cairns and all their connections. This jaunt

gave me much pleasure, and had I time I would give you a more full account of it."

And here is the account Lockhart gives of what was probably the last of these visits, forty-three years later: "Sir Walter took Mr Turner that morning with his friend Skene and myself to Smailholm Crag; and it was while lounging about them, while the painter did his sketch, that he told Mr Skene how the habit of lying on the turf there among the sheep and lambs, when a lame infant, had given his mind a peculiar tenderness for these animals which it had ever since retained. He seemed to enjoy the scene of his childhood, but there was many a touch of sadness both in his eye and his voice."

Having regard to the Natural History side of the Club's interests, it is but appropriate that we should give a glance at the terrain here and note these low ridges, which are known as the "Kelso traps" and attain their greatest development here and about Stichill. It is considered evident that they flowed from numerous orifices and that the group of agglomerate necks found between Melrose and Selkirk may perhaps mark the site of the vents (Summary of Progress of H.M. Geological Survey—year 1738). At the particular point where Smailholm Tower is situated, the lava sheet has been truncated by an oval intrusion, 850 to 1000 yards in diameter—much in the way in which Edinburgh Castle Rock has pierced the sandstones which overlay it; and here, as there, we can note the work of ice, moving this time from south-west to north-east, and producing the familiar "crag and tail" formation.

THE STORY OF BERWICK PARISH CHURCH.

By Rev. W. B. HICKS, M.C., M.A.

THERE has been here the Parish Church of the Holy Trinity, Berwick, for eight hundred years, though the present building only dates from 1651, and this ancient church has reflected the chequered career of the old Border town of Berwick-upon-Tweed.

Apparently the original building was built about 1150, and at different times was under Kelso Abbey, Durham and Coldingham, in the Bishopric of St Andrews.

When Berwick was sacked, in Edward I's reign, the population took refuge in the Parish Church, only to be slaughtered within the sacred building, till at last the vicar fell on his knees before the King, swearing fealty and begging for mercy.

John Knox preached in the old Parish Church, and at the Reformation all the other churches and chantries in Berwick disappeared, leaving it the sole survivor.

James I, and probably Charles I and Cromwell, all worshipped in this building, but it was clearly a small, poor structure, inadequate to accommodate garrison and citizens. In consequence, in 1649-52, parts of the old Berwick Castle were pulled down and the stones were used to build the present Parish Church, though it was not until 1660, at the Restoration, that the Prayer Book was used in the existing building.

Berwick, perhaps more than any other place, illustrates the quarrels between the Church and the Nonconformists, which at times were bitter, and it was not until the restoration of the Church in 1855 that it took its present normal Church of England shape, by the addition of the chancel and the arrangement of all the seats to face the altar at the east end. The pulpit and much of the woodwork is old; some has come from the old Castle, while some was obtained from wrecks at Spittal. The small Flemish medallions in the west window bear the date 1658, and were in the Duke of Buckingham's private chapel. There is some fine old silver plate bearing the arms of the Mayor of Berwick and testifying to the long and close connection between the Mayor and Guild and the old Parish Church.

WODEN LAW AGAIN.

By Sir WALTER AITCHISON, Bart.,
M.A., F.S.A., F.S.A.Scot.

1. *The Setting.*

Woden Law stands in the valley of the Kale Water, on the east side, about four miles above the village of Hownam. It is rather an impressive-looking hill of 1400 feet or so, with a gentle gradient on its easterly slopes but steeply sided on south, west and north. Its summit is crowned by a native fort with triple ramparts, and by other earthworks. And 250 feet below the summit the Roman road called Dere Street, coming up from York, runs along the eastern flank of the hill, and then, bending sharply north-westwards, proceeds downhill through a pass of which the steep northern face of Woden Law forms one side. The native fort thus overlooks, and could menace, about a mile of the main Roman line of communication with the north—and that in an awkward stretch of the road. Moreover, Woden Law commands also that remarkable physical feature known as the Neck, a natural land-bridge, whose part in determining the line taken by Dere Street I have already described in a previous paper.¹

2. *What all the fuss is about.*

The works on top of the hill, though drawn on the large-scale maps as though they were all part and parcel of the native fort, are actually of two different kinds. Firstly, round the level (or perhaps levelled) summit of the hill are the ramparts and ditches of the native fort. Lower down the hill, at an interval varying between 100 and 200 feet, is another system of banks and ditches, the principal element of which is a multi-corrugated crescentic work whose ends rest on the semi-precipitous slopes on the north and south-west sides of the hill, so contrived as to envelop the native fort above. In addition, there are several

¹ *B.N.C.*, vol. xxxi, Pt. I, p. 22.

outlying works of the bank-and-ditch type belonging to the same system.

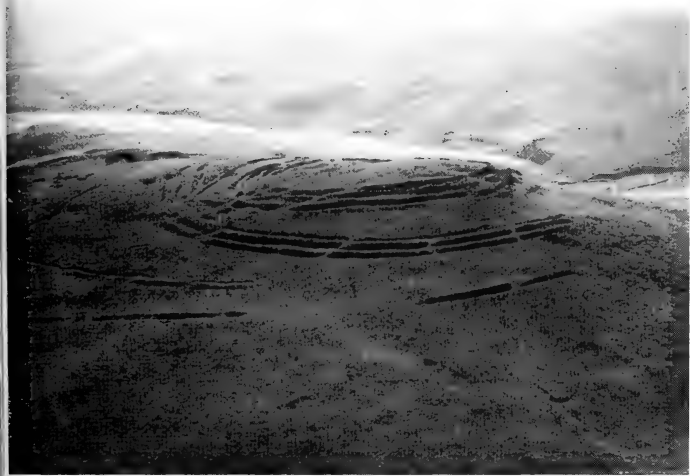
When Professor Richmond was examining the site—I think in the 1930's—he perceived that the lower set of banks and ditches could have formed no part of the defences of the native fort. The fort has three walls and three ditches—each ditch being of course outside its complementary wall. The principal member of the lower group (which I will now refer to as “the crescent”) consists of two linear embankments and three ditches; the order, going downhill, being ditch-bank-ditch-bank-ditch. The significant feature noted by Richmond was that the ditches, except the last one (which is a poor affair, to be explained later), are on the *uphill*-side of the banks. The remaining works belonging to the second system (which I will henceforward call “the outliers”) consist in each case either of one bank and one ditch, or of one bank and two ditches—but there is always a ditch uphill of the bank.

Richmond at that time made the exciting suggestion that the lower works might be the investment lines of Roman troops operating against the fort on the summit of the Law—a conjecture whose likelihood was reinforced by the tactical position of the fort in relation to the road. I made a brief reference to this notion in the paper already mentioned, and expressed the hope that excavation might some day confirm Richmond's perspicacity.

Meantime Dr St Joseph had taken a number of air photographs of the works on Woden Law, and has kindly allowed me to use one of them to illustrate this article. It is reproduced opposite page 108, and the rest of my story will perhaps be clearer if we turn to it right away.

3. *The Air Photograph.*

You are looking south-west, and the fort on the summit of Woden Law occupies the upper centre of the picture. The valley beyond is that of the Kale Water, some meanders of which are visible on the valley-floor to the right. (The high hill in the top left-hand corner, if it comes out in the reproduction, is the easterly of the two Browndean Laws, which form so conspicuous a feature of the landscape in the view north-eastwards from Carter Bar.) The white patch at bottom-

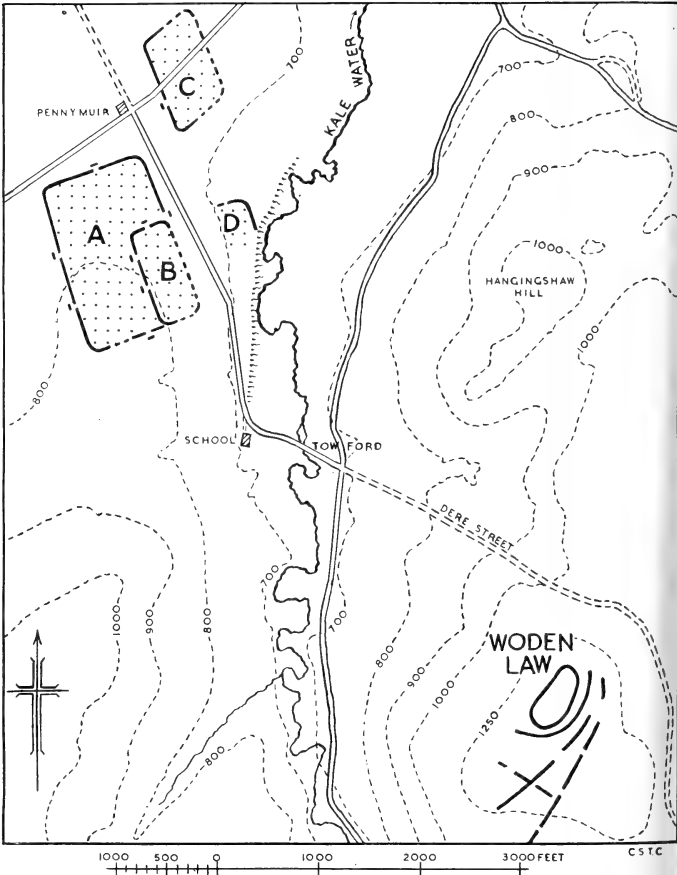


Cambridge University Collection. Copyright reserved.

[Photo: J. K. St Joseph.

ROMAN SIEGE WORKS ENCLOSING NATIVE HILL FORT, WODEN LAW.

[To face p. 108.



SITE-PLAN SHOWING SITUATION OF THE ROMAN CAMPS AT PENNYMUIR IN RELATION TO THE WORKS ON WODEN LAW.

OX 7513.
HOW 7534.

right is the leading-edge of the plane's starboard wing. The black line going leftwards from it at the bottom is a stone field-dyke, with the line of Dere Street showing whitish above it and alongside. The thing like a discarded wristband is a dry-stone sheep stell, and the two white lines to its left are modern drainage ditches. The slope of Woden Law to the right is much steeper than the photograph makes it appear, and the edge of the hill immediately beyond and to the left of the higher earthworks is almost precipitous and is not visible in the photograph. This is the fault of obliquity, and the white ground which seems to form part of the hill-top is in reality in the valley beyond.

The native fort with its triple defence-lines¹ stands out clearly on the summit, and below it is the crescent, with five gaps visible. Below the crescent are three detached outliers, all having ditches on the uphill side, although the photograph seems to suggest the opposite; and running upwards diagonally to the left-hand margin a thinnish line can be discerned. This is another of the outlier series, and is in fact a work as large as the others. Foreshortening diminishes its apparent dimensions.²

4. *The Excavations.*

In 1950, arrangements were made for a test by the spade, and Richmond and St Joseph spent a very wet and inclement September superintending cross-cuts into the works on Woden Law, native as well as Roman—for the lower works are now known to be Roman, though not quite what ardent imagination pictured.

An official report upon the excavation and its discoveries will in due course appear in *P.S.A.*, but Richmond, with his usual kindness, has again allowed the first printed account to appear in the pages of our Club's *History*.

The principal fact discovered by the excavation was that both the crescent and its outliers were indubitably Roman work. This was established by the characteristic profiles of the ditches and by the build-up of the mounds or banks. In the crescent the first ditch—that is, the one nearest the native fort—

¹ The fort has only one wall on its steepest side.

² This is a useful illustration of the kind of correction which has often to be applied to oblique air-views.

is a Punic one, viz., a ditch with an almost vertical scarp and a sloping counter-scarp. The mound behind it was raised on a strip from which the original surface-soil had been removed to a depth of six inches. It was composed of the upcast from the Punic ditch, with large stones excluded, and rested on a foundation of laid turves. Behind that came the second ditch, of V-shape, and then the second bank or mound. This proved to be of unusually interesting construction. It, too, had been built on a turf-bottoming. It had also been carefully kerbed, both back and front, with cut turves. The main core of the mound was of broken rock (including, presumably, the rock saved from No. 1 ditch) laid horizontally. Its top had been made deliberately flat, bedded down with fine stone brash; and at intervals this mound had been expanded in width. The evidence is consistent with its having been built as a platform for a battery of catapults, the expansions being emplacements for the larger machines. The rearward ditch, immediately behind the platform-mound, is V-shaped and in parts unfinished, as if the working parties had by then obtained all the material required.

The excavators found also another significant feature. The cutting of the ditches (and presumably also the erection of the mounds) had clearly been carried out by gang-work, and the lengths of the different working parties had not been properly joined up. This was especially noticeable in places where the ditches had been cut through rock, undisturbed baulks remaining between the lengths.

As to the outliers, these had the same character as one or other of the lines of the crescent. When only one ditch is present they resemble No. 1. Where there is a ditch both to front and rear the mound is of the No. 2 (artillery) type. And it should be mentioned that evidence of the same lack of finish is apparent not only to the digger but to the trained eye looking over the surface-remains at the present day.

5. *Discussion.*

So what are we to make of it? It is certain that the Romans were here, on Woden Law, and that they left rather a sloppy-looking memorial of their activity. But Roman troops knew their job, and a military task on active service would have been

carried out Bristol fashion.¹ Richmond has given an answer (which I am keeping up my sleeve for a minute), and I think we shall have to agree that it is the only answer consistent with the evidence.

Here we have a native fort, in a country hostile to the Roman invaders and occupying a position which threatened the main route of advance or retreat. Encircling the fort we have remains of formidable Roman siege-works—but left in an unfinished condition. A reasonable explanation, at first thought, would be that the natives, behind their trumpery walls on top of the hill, saw that their extinction was inevitable, and so either surrendered or beat an eleventh-hour retreat down the opposite side of the hill. But, as Richmond points out, this won't do. He says, rightly, that if Roman troops were seriously engaged in an operation aimed at the reduction of the fort, the soldiers would require accommodation in the immediate vicinity of the undertaking; in which case, remains of such accommodation would be visible to-day, as they are at Burnswark.² In point of fact, no such remains exist on Woden Law.

And there is another puzzle. Why siege-works of such magnitude? The native fort would, one supposes, have been small beer to Roman troops and could have been mopped up by a cohort in an afternoon.

Richmond's answer to the problem is this: that the remains are those of a practice-exercise in field-engineering; and it seems to be the only theory which will fit all the circumstances.

There was a large Roman garrison in permanent quarters at Newstead, only fifteen miles north along the road, and smaller units in the nearer stations at Cappuck and Chew Green. We may suppose that manœuvres and field-exercises formed part of normal garrison routine, and on the slopes of Woden Law we seem to have a surviving example of such activity. There was suitable summer accommodation for troops at no great distance in the temporary camps at Pennymuir³ and at Chew Green,⁴ and, regarded as a practice area, the slopes of Woden Law were conveniently near the road for haulage of ballistaria. And the fort on top of the hill, which we can picture at that

¹ Cf. The Roman siege-works on Burnswark Hill, Dumfriesshire, *D. & G.*, vol. xiii, 3rd Series, p. 46.

² *Op. cit.*

³ *Op. cit.* p. 107.

⁴ *N.C.H.*, vol. xv, p. 75.

time as abandoned and derelict, would make a good target—indeed the only one of its kind near the road¹ between the two frontier Walls.

There is admittedly one weak point in the argument. It is this: we would expect to know of many more examples of military practice-work in a country so packed with standing garrisons as was northern England and the Scottish Lowlands for a hundred years or more.² But I know of only one other authentic site. This is at Cawthorn³ on the Whitby moors, where a previously perplexing collection of Roman camps was proved, in the course of excavations which lasted from 1923 to 1929, to be a practice ground.

Nevertheless, Richmond's explanation, supported as it is both by the evidence of the spade and by the considerations discussed above, must hold the field; and we shall have to abandon, therefore, our first romantic picture of a tribal "hedgehog" being vigorously subdued by missile and mine.

6. *Native Forts in General.*

Before leaving the site, the excavators decided to examine by excavation the defences of the fort, with a view to finding their composition and, if possible, their structural sequence; but before giving an account of what they found I will refer briefly to the general background.

We in this area are familiar with the appearance of native forts—nearly every hill-top seems to have one, and until recently a fort was simply a fort, and that was that. They were ascribed vaguely to the Iron Age and were supposed to have been built in one go. Even now we don't know much about them—not even what sort of people built them, nor why nor when. But we are beginning to learn. Intelligent field observation, helped by air photography and a small amount of excavation,⁴ point often to a long occupation, perhaps as

¹ Cunzierton Hill was a "possible," but was not used.

² In the Scottish Lowlands the Roman occupation, as ordinarily understood, must have ceased about A.D. 190.

³ *A.J.*, vol. lxxxix.

⁴ "Small"—that is, in relation to the vast field awaiting examination. Good accounts of recent digs at Hownam Rings and at Hayhope Knowe appear in *P.S.A.*, 1947-8 and 1948-9.

long as a thousand years in some cases. And usually the story is one of rebuildings, enlargements, and alterations both in the defences and internal arrangements, reflecting probably successive changes in the political and economic background. For instance, a typical hill-fort in our district might begin as a primitive wooden ring-stockade (of which, in some places, quite visible traces remain in the grass to this day). At a later date the same people or their successors replaced the palisade by a wall and ditch, the wall being made of stone or earth, or of both. Later still, a second, and sometimes a third wall and ditch were added, with possibly other modifications and improvements in the defences. This third phase represents in our neighbourhood the peak of native military architecture, and it has been suggested that the conspicuous elaboration of defence works was the result of the introduction of the sling as a weapon of attack, and/or that it coincided with the arrival of knowledgeable refugees from the south, perhaps fleeing from the Roman armies.

The next stage seems to have been a tranquil one, with defensive walls neglected and huts built in the ditches (presumably for shelter) and even into the walls themselves. It is likely that this phase corresponded in time with the Pax Romana. And then we come to what are called the Dark Ages, an era of shadowy insecurity and unguessable anxieties, when these hill-top forts were often refortified in a new fashion—Heaven knows by whom. And much of all this history your eye can see, unaided by the spade, in worn-down mounds and ditches within twenty-five miles of Berwick.

So it was with no surprise that Richmond and St Joseph found that the triple ramparts of the fort on Woden Law unfolded a story in several separate chapters.

7. A Description of the Defences of the Native Fort.

I have spoken of these as being three in number—the three which can be seen in the photograph, but the excavators' trench showed that there had actually been four lines of defence; and to avoid confusion in reference, I will number them 1 to 4, No. 1 being the innermost wall.

No. 1 Wall proved to be about eight feet in width, and consisted of a core of brashy soil held up on both inner and outer

faces by large blocks of undressed rocks, which had evidently been prised off the igneous outcrops within the wall. It was a feeble affair, and had had no ditch; so the wall-packing must have been just the stony soil stripped off the surface of the hill-top.

No. 2 Wall occupies the brow of the summit, just where the slope of the hill becomes noticeably steep. Its corpus is broken rock, irregularly laid, and on account of its dilapidated condition the excavators found it difficult to decide whether it had had revetment. The trench showed the remains of the wall all tumbled about and mixed up with soil of an unusually dark texture, which may originally have formed some sort of binding element.

The line followed by Wall No. 3 conforms so closely to that of No. 2 that it would ordinarily have been explained as a second-thought addition to it, to strengthen the defence. It is composed of upcast from its rock-cut ditch, and the revetment, such as remains, is of blocks of igneous rock. This last is a feature which, if rightly judged, helps the unravelment of the history of the successive walls, because the igneous rock used here for revetment had not been obtained from the ditch, which is cut through much softer stone. It was won in the first instance from a quarry-delve on the hill-top, and Richmond thinks, though admittedly it is all rather puzzling, that this rock was used first for the facing of Wall No. 2, and then pulled out to serve the same purpose in No. 3. The notion is supported by the fact that the said quarry-delve had, by the time Wall No. 3 was built, begun to silt up and had become grass-covered.

Anyway, whatever the true interpretation may be, the excavators' trench now revealed two more features of great interest. Such material belonging to Wall No. 3 as was lying in the bottom of its ditch had landed there pretty soon after the wall was built, as there was little or no trace of vegetable growth or of silt beneath it. (The significance of this circumstance will be referred to later.) The second discovery was of the remains of a wooden stockade.

Beyond the outer lip of the ditch of Wall No. 3 a continuous low mound is visible, which had been thought to be the tidy disposal of some unused upcast. However, the trench revealed along its toe a line of post-holes, twelve inches deep and the

same apart. These are the holes in which the uprights of a wooden stockade had stood, which either formed the face of an earthen wall (of which the present-day low mound is the only surviving trace), or which was itself intended to be the main obstacle, with a little earth backing (? a fire-step) behind it.

The stockade had had no ditch in front of it, and in this instance (I mean as against the more usual order of precedence) must definitely have followed the erection of Wall No. 3 in structural sequence.

Thus, to recapitulate, we have:

Wall No. 1: a wretched unrevetted affair, with no ditch.

Wall No. 2: originally a decent ditched work which was seemingly partially demolished to provide material for No. 3.

Wall No. 3: a substantial well-built defence, with ditch.

Wall No. 4: an unditched wooden stockade.

But the order of building was not the numerical one adopted for reference. In Richmond's opinion, Wall No. 2 was that which enclosed the first hill-top fort. Then, after an interval, the length of which future field-work on comparable sites may enable us to estimate reasonably closely, Wall No. 2 was superseded by and partially demolished for No. 3, with the timber stockade added as an advance-work in front of and supplementary to it.

This, the fort defended by Walls 3 and 4, was, in Richmond's belief, the one which the Romans subdued in their first advance; and in the unusually dilapidated condition of its walls we may perhaps see evidence of deliberate Roman slighting (a thought illuminated by the absence of time-dirt below the stones in the ditch, and by the fact that much of the soil originally associated with the stockade had apparently been pushed back into the ditch behind it). But, on the other hand, there has, in modern times, been much robbing of the old walls to provide material for field-dykes in the neighbourhood, and the gaps in the Roman lines which figure so prominently in the photograph and which at first sight look as though they had been part of the original design, seem to be modern passages made for the easier removal of stone.

The final occupation of the site (represented by Wall No. 1)

must have taken place either during the Roman pacification of the district, or still later. The area enclosed was smaller, and the wall round it was, as we have seen, unambitious, and intended, one would think, more to shelter the inhabitants from wolves and wind than to give protection from aggressors.

The kindness of my friends, K. A. Steer and C. S. T. Calder of Edinburgh, has enabled me to add, in further illustration of these notes, a sketch-map of the local lay-out. In the sketch-map all the works are shown by single lines in heavy black. Thus a single line suffices for the multiple defences of the native fort, as also for the quintuple elements of the crescent. I should add, also, that the indication of a fourth Roman camp (D) at Pennymuir rests at present on inconclusive evidence.

Nunc est Bibendum!

Abbreviations in the footnotes are:

B.N.C. for *History of the Berwickshire Naturalists' Club.*

D. & G. for *Transactions of the Dumfriesshire and Galloway Natural History and Antiquarian Society.*

N.C.H. for *Northumberland County History.*

A.J. for *Archæological Journal.*

P.S.A. for *Proceedings of the Society of Antiquaries of Scotland.*

REPORT ON UNDERGROUND CHAMBERS AT BERWICK STATION, August 1951.

(Reprinted with Photograph by permission of
The Berwick Journal.)

It was a strange feeling, that first descent into the depths, not knowing whether the weight on the ladder would cause a fresh fall. Slowly down the ladder, through the hole in the triple-layer red-brick arched roof, into a fairyland of stalactites and other calcareous figures, to the rubble-covered floor.

The walls of the chamber were quite dry and in places coated with a thin layer of carbonate of lime, deposited through the centuries. It was impossible to determine whether or not this covering was obscuring any marks or initials which may have given a clue as to the original use of the chamber.

In size the chamber is about twenty feet long, fifteen feet wide and twenty feet high. The walls are composed of heavy, neatly cut stone blocks, although in some places small protuberances are noticeable. In each of the side walls, practically opposite each other, are four vent holes about one foot long and eight inches high. The lowest vents are approximately six feet above floor-level and the others above them are six feet below roof-level.

At first in the gloom it appeared as if the vents were fronted with iron bars, but on a closer inspection these turned out to be stalagmites. It was noticed that air was coming from the vents.

With the aid of a flashlight and by thrusting my hand into the aperture I made a discovery. I found that the walls were some three feet thick and that the central chamber was bounded by chambers of similar dimensions and construction on either side. Both seemed to be quite dry and in an even better state of preservation than the one to which access had been gained.

There is a clay banking parallel to the ends of all three chambers, below the surface. This can be identified when looking through the vents.

The sixty-foot-high wall, built from stones of the old castle,

which separates the stationmaster's garden from that of Miss Richardson, forms the end wall of the chambers. As the chambers are about four feet below the surface of the garden, the floor must be approximately thirty-six feet above Miss Richardson's garden.

The hole leading to the central chamber reveals some large red stones in the form of a rough arch below the level of the roof. Set in the clay, they bear the criss-cross marks of a trowel probably made by some serf or villein of ancient times.

It is possible that at one time there may have been a passage connecting all three chambers at the end where the subsidence took place. Probably it was filled in with rubble by the Irish workers when construction of the Royal Border Bridge was commenced over a hundred years ago.

Berwick station is built on the site of the ancient banqueting hall, so it is quite probable that the chambers were once store rooms. The possibility of dungeons would seem to be ruled out when one takes into consideration the dimensions—martial law was not at all considerate in bygone days. Also, there are no signs of the walls having borne the impedimenta usually associated with such places.

Examination of the curved brickwork of the roof which had fallen away showed that it was topped by a stone flag one and a half inches thick. If excavations were made, it might be found that the garden is set upon a floor of the castle, and that there are additional chambers and passage-ways beneath. Previous subsidences indicate this.

Alternatively it may be that the labourers of one hundred years ago did not relish the thought of work and merely covered the chambers instead of making a thorough job of filling them in.

If that is the case, then we have them to thank! Berwick Castle has been pillaged and torn apart enough in the past. It is up to the present-day generation to see that what has been unearthed is preserved and properly excavated.

When one considers the matter, it seems rather unfair that this site was chosen for a railway station, when it could have been built slightly farther north.

Berwick may not boast a castle to-day, but how many other towns have built a church and barracks from their castles—and still have some left over?



[*Berwick Journal*,

CENTRAL UNDERGROUND CHAMBER AT BERWICK STATION.

[*To face page 118.*



REPORT ON MEETING OF THE BRITISH ASSOCIATION AT EDINBURGH, 1951.

By J. A. THOMSON, F.F.A., F.R.S.E.

To attend one's first meeting of the British Association is an experience at once exciting and impressive. The gathering of such a very numerous assemblage of leaders in the scientific life of the day—a day in which science is so very much in the minds of all of us—and the astonishing number of subjects offered for discussion, let alone what is provided by way of "side shows" in the shape of receptions, dinners, and tours, is almost enough to turn one's head. But, thanks to the devoted work of the officials and committees in charge of the preparations for the meeting, the programmes and guides issued in advance to the members made it possible to determine the extent to which participation might be desirable and profitable.

The presence of His Royal Highness the Duke of Edinburgh, as President for the year, gave quite unusual distinction to the occasion: and as, preliminarily to the delivery of his inaugural address, the opportunity of his presence was taken by the University of Edinburgh to confer on him the honorary degree of Doctor of Laws, we were treated to a brilliant spectacle in the McEwan Hall, where so many of the crowded audience wore their academic robes and hoods.

Choosing as his presidential theme "The British Contribution to Science and Technology in the Past Hundred Years," His Royal Highness gave a remarkable survey of the achievements that had been witnessed within the period since the "Great Exhibition" of 1851, holding his audience spell-bound, as it were, for close upon an hour. To those of us whose memories could reach back over, say, half a century, much that we heard was familiar—so great had been the development compressed into that period; but it was quite an experience to have it thus unrolled before us, and linked to what had gone before and to the achievements of the giants of the earlier time. But the

President did not rest content with merely telling the story of the past; he would use it as an encouragement to fresh efforts for the future; and he reminded us of the very close relationship of the advancement of science and the welfare of mankind. "The instrument of scientific knowledge," he said, "has reached a point where we can either set the world free from drudgery, fear, hunger, and pestilence, or obliterate life itself. . . . Progress in almost every form of human activity depends upon the continual efforts of scientists. The nation's wealth and prosperity are governed by the rapid application of science to its industries and commerce. The nation's workers depend upon science for the maintenance and improvement in their standard of health, housing and food. Finally, superiority, or even our ability to survive, in war, is a direct measure of the excellence and capacity of the scientific team. This team of research workers and engineers has a dual responsibility, one for its work and the other as informed citizens; and it can only fulfil its proper functions if its members have a sound general education as well as a thorough training in science. It is no less important that the people who control the scientific machine, both laymen and scientists, should have a proper understanding and appreciation of what science has grown into and its place among the great forces of the world.

"Ladies and gentlemen, it is clearly our duty as citizens to see that science is used for the benefit of mankind. For, of what use is science if man does not survive?"

A specially interesting feature of the occasion of this opening meeting was the "televising" of the function to the Usher Hall, where another large audience had assembled. It proved successful in the highest degree—an achievement for which a large share of the credit is due to Sir Edward Appleton, G.B.E., F.R.S., Principal of the University of Edinburgh—and the event may, in after days, be accounted a landmark in the development of this novel branch of technology.

At subsequent meetings His Royal Highness took, as the *Scotsman* put it, "a very active, but very informal and interested, part, visiting several of the lectures and addresses, going in quietly and unannounced to hear the steady rhythm of the movement which he had set going with such efficiency" on the opening evening: and, in a message sent at the close,

he expressed the pleasure he had experienced and his admiration for the way in which everything had been arranged.

Its work having been once more set going, the Association, in accordance with custom, broke up into separate sections—Physics, Mathematics, Education, Agriculture, and so on—for the purposes of discussion; and members had a very wide choice of meetings they might attend. As was to be expected, much prominence was given, in the addresses and papers submitted, to problems that have emerged and developments that have been reached in such matters, for example, as aviation, radio, television, growth and movements of population, hydro-electric schemes, food supply, and conservation of the country's natural resources. Much, very much, has been accomplished in these fields, but there yet remains a great deal to be overtaken. The danger of one-sided mental development came in for comment: Sir Hector Hetherington, Principal of Glasgow University, in his presidential address to the Education Section, under the title, "Mid-Century: Retrospect and Prospect," insisted on the need for shaping and maintaining a scale of values which would give integrity of judgment, which is an element of integrity of character—"exposure to the best that has been known and thought" was his prescription for combating the possible undesirable effects of specialisation; while Sir Alexander Gray, of the Chair of Economics in Edinburgh University, speaking on a review of public expenditure on social services over the past hundred years, asked whether there was any logical limit to the extent to which the State may go, or should go, with regard to providing the common needs of humanity, and how much an individual is to be left to look after himself.

One of the most interesting sessions was a demonstration, in the Mathematics and Physics Section, of "thinking" machines which solve complicated logical problems!

Appropriately, a great deal of attention was given to subjects of Scottish and even local interest, the ground for consideration of these having been well covered in the exhaustive and attractive *Scientific Survey of South-Eastern Scotland* that was handed to each of us when we made our initial visit to the Reception Room. The advances that are taking place in the development of our coal-fields, agriculture, etc., are therein dealt with at

length. And there are chapters by well-known local authorities on the history and pre-history of the district (in which there are naturally many references to places and topics familiar to Club members), on Edinburgh's civic and educational growth and organisation, on its research institutions, and on the outlook for the area's future. The volume is clearly one to be cherished as a souvenir of more than passing interest.

It should be worth while to transcribe here some remarks made by Dr Douglas A. Allan, the Director of the Royal Scottish Museum, in his presidential address to the Conference of Delegates of Corresponding Societies, when (speaking on "The Scottish Scene") he said: "There await solution many and complex problems not only of maintaining the wild life but also of studying the factors which control it, the chain of consequences of minute variations in conditions, and the possibility of applying the results achieved to a much wider and possibly economic field.

"Here is the need for a special Home Guard of local amateur naturalists, including botanists, entomologists, ornithologists, and zoological specialists. There was a day when Scotland was rich in such men and women, experts and enthusiasts who were active supporters of the various learned societies. Too long have their successors been relegated to the background in favour of more academic professionals, complete with up-to-date and expensive laboratory equipment.

"The societies are still there, with members who enjoy informed lectures and conducted excursions; what is necessary is to rouse them to the realisation that their active co-operation is needed and that there is an urgent demand for first-rate local amateur experts, who, being always on the spot, can bring invaluable knowledge and experience to the visiting professional, whose time in any district must perforce be limited."

Large-scale gatherings, beyond the civic reception given by the Lord Provost and Magistrates of the city, in the spacious halls of the Royal Scottish Museum, included the religious service on the evening of Sunday, 12th August, in St Giles Cathedral, when the sermon was preached by the Rev. Professor Donald M. Baillie, of St Andrews University. There were also the following evening discourses, open to the public, delivered in the Usher Hall: "Alchemy and Alchemists," by Professor John Read, F.R.S.; "Natural Science and the Spiritual Life,"

by the Very Reverend Principal John Baillie; and "The Contemplative Gardener," by Sir Edward Salisbury, C.B.E.

A very large number of tours by bus and train had been arranged for the delectation of members, giving opportunities of observing in the field many features of the subjects that were being dealt with in the lecture rooms, as well as serving the purposes of sightseeing and mere recreation. In addition, the possibility was given of visits to leading works and establishments representative of the wide range of Edinburgh's productive industries.

Altogether it was a memorable experience; and the writer would like to record his thanks to the Council of the Club and to express his appreciation of the honour they did him in appointing him to represent them on this occasion.

OBITUARY NOTICES.

(a) RALPH HERBERT DODDS, M.C.

By THOMAS PURVES.

THE Club has lost an old and valued member by the death of Ralph Herbert Dodds.

Mr Dodds joined the Club in 1903 and became Treasurer in 1920, which post he held with distinction until 1948 when he had to resign owing to ill-health. During his Treasurership, in 1931, the Club celebrated its Centenary, and he, along with the late Secretary, Mr J. H. Craw, was responsible for the arrangements for the Centenary celebrations and the Club Breakfast held at Grantshouse. To mark the Club Centenary an "Indicator" was elected at Hume Castle (visited again this year). In addition, during his term of office, the Memorial Stone for the Battle of Halidon Hill was erected, the railings at the Flodden Memorial were set up, and renovations at Sybil's Well, Flodden, completed.

Whilst, with his many other activities, Mr Dodds could not attend as many meetings as he would have liked, he was always intensely interested in the affairs of the Club and ready to support it in any way possible.

He served with the K.O.S.B.s throughout the 1914-18 War, was badly wounded at Loos and awarded the M.C. He was a keen naturalist and sportsman, being especially interested in fishing, shooting, tennis and hockey. For many years he organised the North Northumberland Lawn Tennis Tournaments at Berwick. He had a genius for organisation and an immense capacity for detail. As a friend he was always ready to give a helping hand to those in trouble, and whatever he undertook he saw through to the end.

(b) ROBERT CARR.

MR CARR, who died in London on 29th June in his hundredth year, was the "Father" of the Club in point both of age and seniority of membership (1890).

He was born at Felkington, near Grindon, and after taking his agricultural diploma at Edinburgh, and becoming a life member by examination of the Highland (now the Royal Highland and Agricultural) Society of Scotland, returned home to Felkington to assist his father. Later he farmed East Allerdean, and in the Hetton and Grindon areas, retiring finally in 1918, after which he resided for some years in Berwick. His last years were spent, for health reasons, in a London nursing home, where he eventually died.

As a member of the Club, his chief interest was geology, including soil conditions and strata, particularly as affecting the Merse. Another of his pet subjects was the explanation of the Catrail found in many parts of the Border countryside. As late as 1939 he addressed the third Field Meeting of the Club (to Coupland Castle, Cuddy's Cove and West Horton) in July. His talk at the Cove (St Cuthbert's Cave) was specially within his orbit when he described how it had been hollowed out by the waters which covered Milfield Plain at the end of the Ice Age.

Since the War he wrote at least twice to the Secretary on geological subjects, in the first case suggesting a short paper, which, unfortunately, never materialised. He wrote: "This short scribbling on the 'Submarine Canyons' may interest you should you be able to read it" (mentioning canyons at the bridges recently built on the Teviot and Tweed at Ancrum and Berwick); "how formed and by what agency I could explain in a short article." His letters, though the handwriting was now and then hard to decipher, showed no enfeeblement of his mental activity.

A keen sportsman, he was an excellent shot and for long a regular follower of the Berwickshire and North Northumberland Hunts. He also proved himself a sincere and admirable

Churchman—an “all-rounder,” in fact, of a rapidly disappearing type.

His successors, as joint “Fathers” of the Club, are Sir John Milne Home and Mr Robert Middlemas, both ex-Presidents, and both of whom joined in October 1898.

ORNITHOLOGICAL NOTES.

(a) SOME THOUGHTS ON BIRDS.

By Mrs M. E. BUIST.

OUR birds are unexpectedly varied and attractive, perhaps because the geographical combination of river and garden localises water and land species.

We are not surprised, in the coldest weather, to see moorhens feeding on the window-sills, and in the early summer to hear that in a few minutes the swan family, which nest on the pond of a hill farm, will be marching by on the high road on their annual trek to the main waters of Teviot or Tweed. This journey has been an annual event for several years, and if the party is prevented in one day from reaching Teviot, they will continue by road and over fields to the Tweed near Kelso, which journey took them three days last year. The parent birds were very footsore, but a police escort solved the traffic problem for them over the last mile or so.

An early memory of the ways of Kirkbank birds was that of the rapid descent of a blue tit family down the long spout of our pump, they having spent their babyhood within the pump-head.

My favourite bird in our garden is a lovely ringed wood-pigeon, which is so stoutly dignified that he is known as "Mr Pepys." He spends much time on summer days meditating in the birds' bath, in which he sits majestically and does not bother to wash. His mate has a nest in a holly tree within ten feet of the house. In this same holly a tree sparrow built a nest most unexpectedly, but it was destroyed by plebeian relatives.

A very tame blackbird has had, in the last week of March, a young family; she comes to the kitchen window for oatmeal, which she eats herself, and to the scullery for unconsidered trifles from the hens' dish, which she carries to the nest. Does she know that oatmeal would swell in the insides of her family?

In late January of this year, a charm of goldfinches was active near Kirkbank Station, and was watched there by our tenant, Mr Shiells, a retired gamekeeper; at that time also I saw

goosanders and whooper swans on many occasions on our reach of Teviot. I saw eleven at one time, but more generally five and three. They seemed to be on the best of terms with our resident mute swans. The whoopers left us in February with the goosanders, shelduck, little grebe, and tufted ducks.

Four years ago a pair of hawfinches nested in some overgrown privet bushes, and near to them was the nest of a long-tailed tit. Alas! both nests were destroyed, probably by owls, and the hawfinches have never returned.

We are not anxious for rooks to build here; they tried desperately each spring to establish a base, and in spite of all we could do to frighten them, a pair built a nest and were subsequently shot. By chance, the bodies of both birds caught in the tree, and, within an hour, scores of rooks had arrived in our trees and were in a state of great excitement. The birds demonstrated noisily for an hour or so and then dispersed. From that day no rook has ever attempted to build in our very suitable trees.

From summer to summer I look forward to the gentle presence of the sedge warbler. During the short summer nights I listen for his sweet song, which is so beautiful in the semi-darkness at midnight.

All the year round, the whaup is a joy to hear; every note is lovely and not quite of this world. He nests very near to this garden in which so many birds sing beautifully. But of all bird songs and sounds, the most lovely and satisfying are those of the wood-pigeon, the whaup, the sedge warbler and the blackbird.

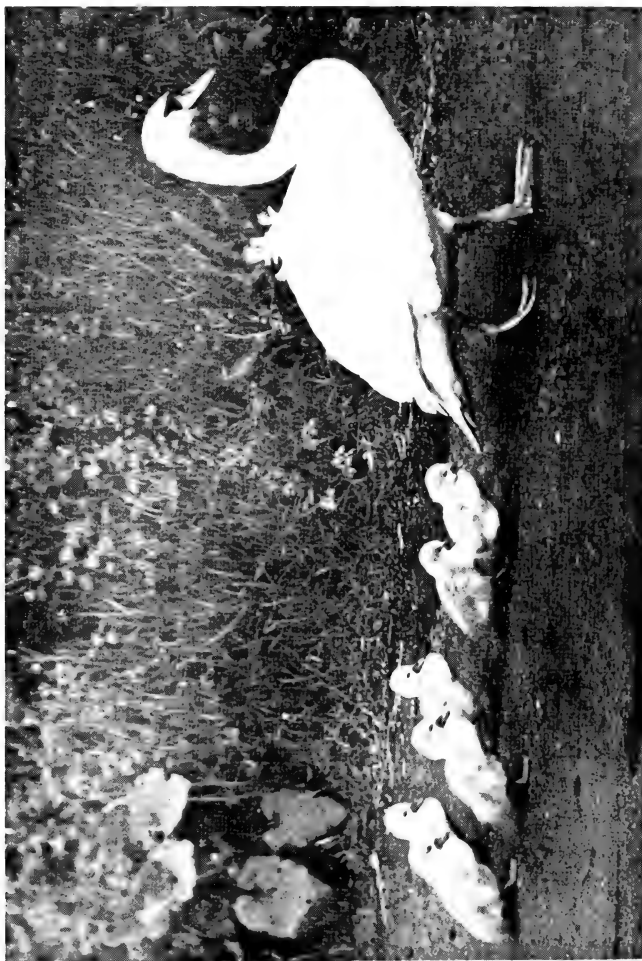
(b) NOTE AS TO KINGFISHERS ON THE RIVER COQUET.

By Captain GEORGE TATE.

A WEEK ago the writer saw two kingfishers curvetting over the River Coquet, near Warkworth Bridge, as if seeking where to build their nest. This is rather interesting, as in recent years the poisonous and polluted water, which for some time had flowed from Woodhouse Colliery, near Shilbottle, down a burn into the Coquet at Houndean, had destroyed all fish and insect life in the burn, and caused considerable pollution in the river

SWANS CONDUCTING CYGNETS ALONG MAIN ROAD BETWEEN ECKFORD AND KELSO.

[To face p. 126.]



SWAN CONDUCTING CYGNETS ALONG MAIN ROAD BETWEEN PORTLAND AND KETES

itself. During this period the writer noticed the scarcity of kingfishers on this part of the Coquet. Since the poisonous water has been diverted by the Coal Board from the burn by a land drain to the sea, fish life has returned to it and the kingfishers are apparently coming back to this part of the river.

(c) REPORT OF OBSERVATIONS, 1951.

By Lieutenant-Colonel W. M. LOGAN HOME.

Date.	Number and Species.	Seen by	Place and Remarks.
Jan. 9.	1 Green Sandpiper.	Col. W. M. Logan Home.	On Ladywell Burn, near Edrom.
Feb. 11-12.	Wood-pigeons.	„	A pair seen building in an evergreen; nest, however, was not completed, as weather became colder.
July 19.	3 Peregrine Falcons.	„	Seen near Fast Castle; ♂ watched eating a Common Gull; later all three were seen wheeling about and the ♂ stooping at the juvenile, which made off inland.
Sept. 18 to Oct. 1.	Greenshanks.	„	On the Whiteadder; 2 near Edrom House, 4 near Whitehall. (First record for the Whiteadder.)
Nov. 3.	Pair of White Wagtails (<i>Motacilla alba</i>)	„	Watched through a window at 6 to 10 feet, catching flies on Edrom House roof. (First record for Berwickshire.)
During Winter.	Great Crested Grebe.	T. McGregor Tait.	Seen on the Tweed between the two bridges for a week.
Late Autumn.	6 or 8 Waxwings.	„	Seen near Berwick.

PINUS PINEA AT DUNGLASS.

By Sir WALTER AITCHISON, Bart.,
M.A., F.S.A., F.S.A.Scot.

IN 1905 the late Commander Norman, in a short paper (*History*, vol. xix, pp. 173-7), drew members' attention to the fact that a number of *Pinus Pinea* were at that date growing on the west side of the railway embankment adjacent to the entrance gates of Dunglass House, near Cockburnspath.

The Commander believed (I think wrongly) that these were the only specimens of *Pinus Pinea* known at that time to be growing north of the Thames, but he was perhaps right in saying that they were the most northerly examples then to be found in the British Isles. Their origin was obscure, but he obtained evidence to suggest that they had been planted *c.* 1850.

I had the curiosity to visit the place in the spring of 1951, to see whether the trees were still there. It is good to be able to report that the pines are flourishing—about half a dozen of them—though somewhat crowded by natives; and that they exhibit the peculiar umbrella-like head characteristic of their growth on Mediterranean shores. A photograph is reproduced, facing p. 128.

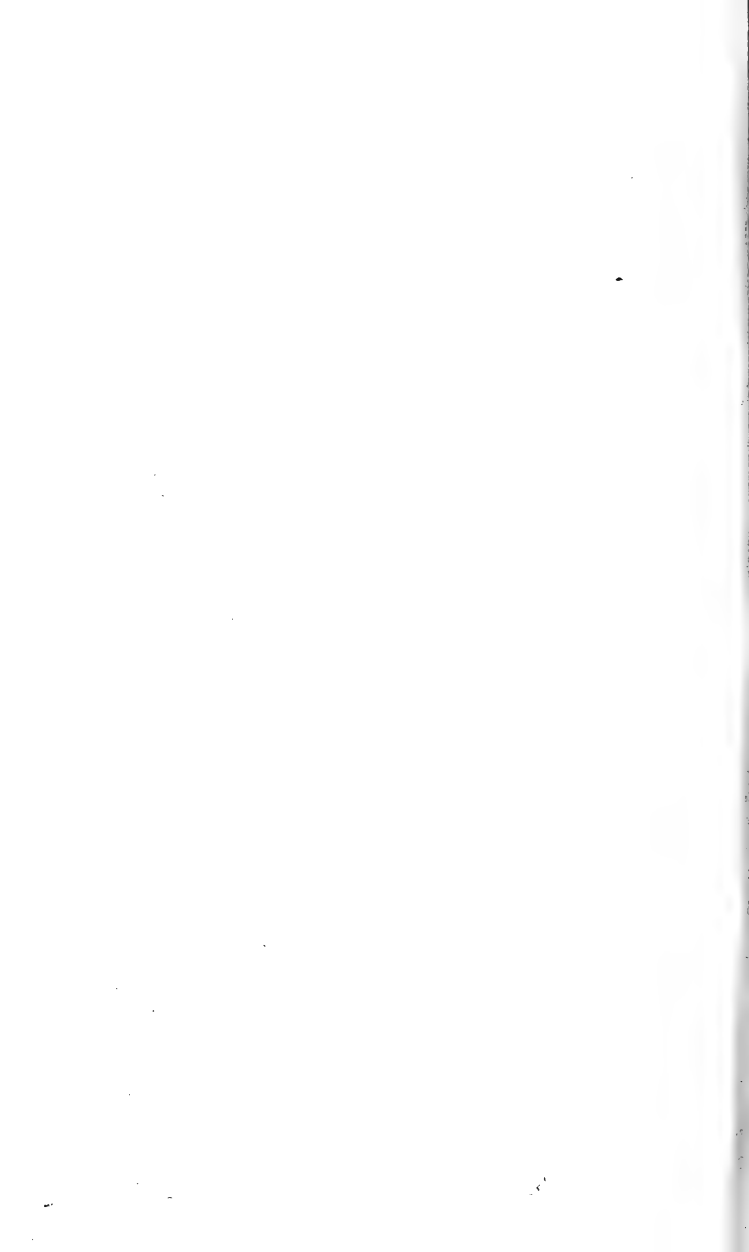
The trees can be seen by taking the old main road which branches off from the modern loop half a mile north of Cockburnspath. They stand at the foot of the west side of the railway embankment just after passing the gates into the Dunglass policies. The National Grid Reference is 768723.

Note.—As a result of the representations of the writer, he has now received a letter from the Civil Engineer, Railway Executive (Scottish Region), stating that the site has been cleared of undergrowth, and giving an assurance that everything possible will be done through the local representative of British Railways (the owners of the trees) for their preservation.



PINUS PINEA AT DUNGLASS.

[To face p. 128.]



NOTE ON CORRESPONDENCE BETWEEN THE SECRETARY AND MR P. J. MACLAGAN AS TO USE OF BLEWITS BY DYERS IN BERWICK.

EARLY in October 1951 Mr Cowan received a letter from Oxford, from a Mr P. J. MacLagan, stating that in his "King Penguin" book on *Edible Fungi*, the author, Mr J. Ramsbottom, refers to the use of Blewits ("Blue Stalk" mushrooms) by dyers in Berwick, and had given him as his authority an article by Mr A. W. Bartlett in the *Club History* (vol. xxviii, 1934, p. 246). He, therefore, asked for information as to the origin and present state of this industry. In a further letter five months later he mentioned to Mr Cowan that he had ascertained meanwhile that there had never been a dyeing industry in Berwick within the memory of anyone now living there, and suggested that a correction to that effect should be inserted in the *History*. Before taking such action, however, the Secretary felt it desirable at least to try to make contact with Mr Bartlett, who was never a member of the Club. Following on further correspondence, Mr MacLagan wrote again to say that he had heard from Mr Ramsbottom (who knew Mr Bartlett) that he was at one time a Lecturer in Botany at Armstrong College, Newcastle, but that his name no longer appears in the Directory of University and College Teachers. In a final letter to Mr Cowan, dated 2nd April last, Mr MacLagan quotes another letter received from Mr Ramsbottom, in which the latter states: "I think that there can be no doubt that the *Tricholoma* mushroom was never used to extract the colour from the stem. I think it was a local story, which A. W. Bartlett heard and believed. You will recollect that I heard it from a local innkeeper at (?) Boulmer and that the servants at a hotel at Alnmouth knew of the story. In spite of the fact that a chemical friend of mine disputed the possibility, I was prepared to accept it on the evidence. . . . For me, in future, if I mention the dye business, it will be as a local story."

As a last resort, we approached our old friend, Mr J. B. Duncan, with whom Mr MacLagan had already been in touch, and have received the following reply: "I regret I can add nothing to the short note I wrote Mr MacLagan regarding Blewits. I used to know a little of Mr Bartlett, but he has been dead many years now. I could not hear of anyone who had even heard of the local dyeing industry. I would say it must be an error and a complete myth, and the subject not worth pursuing."

One interesting fact emerges, incidentally, from the correspondence, that there is still a considerable trade in "Blue Stalks" *as an article of diet* carried on between parts of North-umberland and towns in the Midlands: though this, begun in some cases as long as twenty years ago, is gradually falling off, through the growing grounds of the fungus being now occupied by open-cast mining.

Month.	Temperature.		Days with Temperature at or below 32°.		Bright Sunshine.			
	Maximum.	Minimum.			Hrs.	Days with Sun.	Hrs.	Days with Sun.
			The Roan, Lauder.				Swinton House.	
			Cowdenknowes.					
			Swinton House.					
			Manderston.					
			Duns Castle.					
			Marchmont.					
			Whitchester.					
January	45	20	26	18	37.4	16	33.2	13
February	48	22	26	16	52.2	19	47.4	13
March	52	21	26	18	70.2	19	68.0	19
April	61	24	26	8	164.5	28	143.9	27
May	66	26	31	2	156.7	23	124.0	25
June	74	34	37	..	191.3	27	154.4	26
July	71	44	42	..	173.8	28	146.8	28
August	73	41	42	..	131.5	26	123.0	26
September	70	37	39	..	144.6	25	147.9	27
October	60	27	27	3	86.4	24	95.6	24
November	52	28	30	3	41.4	22	44.1	17
December	49	17	24	16	45.1	22	41.7	21
Year	74	17	129	84	1295.1	279	1170.0	266

TREASURER'S FINANCIAL STATEMENT FOR YEAR ENDING 20th SEPTEMBER 1951.

RECEIPTS.

Credit Balance at 20th September 1950	£289 11 7
<i>Subscriptions</i> (including four for 1952, Entrance Fees and Arrears)	348 2 3
<i>Sale of Club Badges</i>	4 11 0
Received from Librarian for <i>sale of Histories</i>	1 7 6

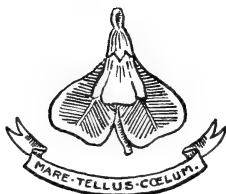
PAYMENTS.

<i>History for 1949</i>	£201 6 0
<i>Printing and Stationery—</i> Neill & Co. Ltd.	£51 6 11
Martin Ltd.	6 14 2
<i>Badges—</i> Reid & Co.	58 1 1
<i>Officials' Expenses—</i> Secretary (H. H. C.)	28 15 0
Editing Secretary (A. A. B.)	£31 3 4
Treasurers (T. P. and H. F. M. C.)	3 10 0
	8 0 0
<i>Subscriptions—</i> Royal Society for the Protection of Birds	42 13 4
Chillingham Wild Cattle Association	£1 1 0
Regional Council of British Archaeology	1 1 0
British Association	3 7 0
	2 2 0
<i>Miscellaneous—</i> King's Arms Hotel, Hire of Room for Meeting	7 11 0
Credit Balance at Bank 20th September 1951	2 2 0
	303 3 11
	<u>£643 12 4</u>

APPROXIMATE BALANCE SHEET.

LIABILITIES.	ASSETS.
Estimated Account for printing 1950 <i>History</i>	Cash in Bank: on General Account
£226 18 0	£303 3 11
Credit Balances: General Account	on Investment Account
£76 5 11	154 8 2
Investment Account	£457 12 1
154 8 2	
230 14 1	
<u>£457 12 1</u>	<u>£457 12 1</u>

28th September 1951.—I have examined the above Financial Statement with the books and receipted accounts, and find it correct. The Bank Pass-Book has been exhibited to me.
(Signed) P. G. GEGGIE.



THE BERWICKSHIRE NATURALISTS' CLUB RULES AND REGULATIONS.

(Founded September 2nd, 1831.)

BADGE : WOOD SORREL.

MOTTO : " MARE ET TELLUS, ET, QUOD TEGIT OMNIA, CÆLUM."

1. The name of the Club is The Berwickshire Naturalists' Club (1831).
2. The object of the Club is to investigate the natural history and antiquities of Berwickshire and its vicinage (1831).
3. All interested in these objects are eligible for membership (1831).
4. The Club consists of (a) Ordinary Members, (b) Contributing Libraries and Societies, (c) Corresponding Members, eminent men of science whom the Club desires to honour (1883), (d) Honorary Lady Members, and (e) Associate Members, non-paying members who work along with the Club (1883).
5. New members are elected at any meeting of the Club by the unanimous vote of members present, the official forms having been duly completed, and the nominations having been approved by the officials of the Club. New members are entitled to the privileges of membership upon payment of the entrance and membership fees (1922), concerning which they will be duly notified (1937). If elected in September such member is eligible to attend the Annual Meeting for the year, no fees being due before 1st January (1937). The names of new members who have not taken up membership within six months of election, and after having received three notices, will be removed from the list (1925). The Club rules and list of members at date are sent on election (1937).

6. The entrance fee is 20s. (1937), and the annual subscription 20s. (1948). These are both due on election. Subsequent subscriptions are due after the annual business meeting, and entitle members to attend the meetings and to receive a copy of the Club's *History* for the ensuing year (1925). No fees or subscriptions should be sent until requested by the Treasurer (1937).
7. The number of Ordinary Members is limited to 400. The names of candidates are brought forward in priority of application, power being reserved to the President to nominate independently in special cases, irrespective of the number of members on the Roll (1884).
8. The *History* of the Club is issued only to members who have paid their year's subscription. Names of members who are in arrears for two years will be removed from the list after due notice has been given to them (1886).
9. The Club shall hold no property (1831), except literature (1906).
10. The Office-Bearers of the Club are a President, who is appointed annually by the retiring President; a Vice-President (1932), an Organising Secretary, an Editing Secretary, two Treasurers (1931), and a Librarian, who are elected at the annual business meeting (1925), and who shall form the Council of the Club (1931); with in addition one lady and one gentleman co-opted by the Council as members of the Council and one member (lady or gentleman) co-opted by the Council specially to deal with Natural History subjects (1948) as member of the Council, to serve for the ensuing year; they will retire at the Annual Meeting, but being eligible can offer themselves for re-election (1937).
11. Expenses incurred by the Office-Bearers are refunded. The Secretary's expenses, both in organising and attending the meetings of the Club, may be defrayed out of the funds (1909).
12. Five monthly meetings are held from May till September (1831). The annual business meeting is held in the beginning of October. Extra meetings for special purposes may be arranged (1925).
13. Notices of meetings are issued to members at least eight days in advance (1831).

14. Members may bring guests to the meetings, but the notices of meeting are not transferable (1925). Guests may only attend when accompanied by members (1937).
15. At Field Meetings no paper or other refuse may be left on the ground. All gates passed through must be left closed (1925). No dogs are allowed (1932).
16. Members omitting to book seats for meals or drives beforehand must wait till those having done so are accommodated (1925).
17. Contributors of papers to the *History* receive five extra copies.
18. The Secretary must be notified of any suggested change in Rules not later than the 1st of September in each year, all members having not less than ten days' notice of such (1937).

"RULE FIRST AND LAST."

"Every member must bring with him good humour, good behaviour, and a good wish to oblige. This rule cannot be broken by any member without the unanimous consent of the Club" (1849)—"Correspondence of Dr George Johnston," p. 414 (Founder and first President of the Club).

THE LIBRARY.

A complete set of the Club's *History*, publications of kindred Societies, and other local and scientific literature, are now housed in a large bookcase in the Public Library, Marygate, Berwick-upon-Tweed. (See Notice on the case.) Parts of the Club's *History* are in charge of the Club Librarian, Frederick Parker, 12 Castle Terrace, Berwick-upon-Tweed, and may be obtained "only on loan" by application to him. Parts are also on sale to Members or Non-members at the following prices. Extra copies (above three) are, to Members, 3s. 6d. per part up to 1920; to Non-members, 6s. (1906). From 1921 to 1933, to Members, 6s.; to Non-members, 10s. (1921). From 1934 to 1947, to Members, 5s.; to Non-members, 7s. 6d. From 1948 until further notice, to Members, 7s. 6d.; to Non-members, 10s. (1921); sister Societies and Libraries, 2s. 6d. Centenary Volume and Index, 10s. (1932). (When only one copy of year is in stock, it is not for sale.—F. M. Norman, Secy., 20/8/1906). Future prices to be adjusted by the Council from time to time in accordance with cost (1934)

THE PINK SLIP.

B.N.C., 1939.

1. Members are reminded that under Rule 15 no dogs are allowed at meetings.
2. Care should be taken that no paper or other refuse be left on the ground, and that wickets and gates be closed.
3. Smokers are requested to see that matches and cigarette ends are extinguished before throwing away, especially in woods.
4. During talks, members are asked to form a wide circle round the speaker, to enable everyone to hear.
5. When the attention of members is desired, the Secretary will sound the Horn.
6. The President's car (or car selected by the Secretary in his absence) will carry the Club Flag, and members are asked not to pass or get in front of this car, unless they are leaving the meeting.
7. Dr Johnston's "Rule First and Last"—
"Every member must bring with him good humour, good behaviour, and a good wish to oblige."

THE BERWICKSHIRE NATURALISTS' CLUB.

LIST OF MEMBERS, 1st January 1952.

Those marked with an Asterisk are Ex-Presidents.

LIFE MEMBERS.

	Date of Admission.
Craw, Mrs A. M.; 14 Greenhill Gardens, Edinburgh, 10	1933
Dodds, Mrs A. M.; Avenue House, Berwick-upon-Tweed	1951
Hope, Miss M. I.; The Jenners, Minchinhampton	1913

ORDINARY MEMBERS.

Aikman, John S.; Jedneuk, Jedburgh	1939
Aitchison, Mrs A. L.; Tweedmount, Melrose	1930
Aitchison, Mrs B. H.; 15 Frogstone Road West, Edinburgh, 10	1919
Aitchison, Henry A.; Lochton, Coldstream	1946
Aitchison, Sir Walter de Lancey, Bart., M.A., F.S.A.; Coupland Castle, Wooler	1933
Aitchison, S. C. de L.; Coupland Castle, Wooler	1943
Aitchison, Miss Shena D.; Three-way Tranwick Woods, Morpeth	1946
Aiton, Mrs Scott; Legerwood, Earlston	1936
Allan, John, C.B., M.A., LL.D., F.B.A., F.S.A.; The University, Edinburgh	1920
*Allhusen, S. D.; The Wynding, Beadnell, Chathill, Northumber- land	1934
Allhusen, Mrs K. R.; The Wynding, Beadnell, Chathill, Northum- berland	1923
Angus, W.; 69 Cluny Gardens, Edinburgh, 10	1910
Baillie, John, M.B.E.; 13 Langton Gate, Duns	1925
Barbour, Archibald; Mansefield, Duns	1946
Barstow, Mrs Nancy; Wedderburn Castle, Duns	1947
Bayley, Miss H. M.; Hempsford, Kelso	1949
Bell, Mrs Mary; Highcliff, Berwick-upon-Tweed	1946
Biddulph, Lady; The Pavilion, Melrose	1926
*Blair, C. H. Hunter, M.A., D.Litt., F.S.A.; 57 Highbury, Newcastle-upon-Tyne	1918
Bolam, A. C.; 58 Ravensdowne, Berwick-upon-Tweed	1934
*Boyd, Rev. Halbert J.; Homes of St Barnabas, Dormansland, Lingfield, Surrey	1935

LIST OF MEMBERS

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	Date of Admission.
Boyd, Commander John G.; Whiterigg, St Boswells	1938
Boyd, Miss Jessie B.; Faldonside, Melrose	1905
Brackenbury, Charles H.; Tweedhill, Berwick-upon-Tweed	1947
Brooks, R., Ednam House Hotel, Kelso	1950
Brown, Mrs Ella C.; West Learmouth, Cornhill-on-Tweed	1947
Bryce, T. H.; Westwood, Gordon	1949
Buist, A. A., W.S.; Kirkbank, Kelso, Roxburghshire	1937
Buist, Mrs M. E.; Kirkbank, Kelso, Roxburghshire	1937
Calder, Mrs Dorothy F.; New Heaton, Cornhill-on-Tweed	1946
Calder, Mrs Harriet G.; Billiemains, Duns	1946
Calder, Mrs Mary A. H.; Marden, Duns	1923
Cameron, Miss Elizabeth W.; Trinity, Duns	1912
Campbell, John; Old School House, Oxtou, Lauder	1951
Campbell, John M.; Primrose Hill, Duns	1948
Carr, Robert; 30 Alleyn Park, West Dulwich, London, S.E. 21	1890
Carse, Mrs W. A., J.P.; South Ord, Berwick-upon-Tweed	1951
Caverhill, Miss H. F. M.; 2 Ravensdowne, Berwick-upon-Tweed	1923
Chartres, Mrs Mary; Mindrum, Northumberland	1930
Christison, Gen. Sir A. F. P., Bart.; Dingleton Gardens, Melrose	1949
Clay, Miss B. A. S. Thomson; 19 South Oswald Road, Edinburgh, 9	1939
Clennell, Miss Amy Fenwicke; Dunstan House, Alnwick	1925
Clennell, Miss C. M. Fenwicke; Glanton, Northumberland	1925
Cockburn, J. W.; Whiteburn, Duns	1925
Collingwood, John C.; Cornhill House, Cornhill-on-Tweed	1902
Cowan, Mrs Allister; Eastfield, Bowden, Melrose	1929
Cowan, Henry Hargrave; The Roan, Lauder	1931
Craw, H. A.; 30 Cranley Gardens, London, S.W. 7	1933
Cresswell, H. G. Baker; Preston Tower, Chathill, Northumberland	1938
Cresswell, Mrs; Hauxley Hall, Amble, Northumberland	1923
Cresswell, Mrs R. B.; Newton-by-the-Sea	1949
Cresswell, Miss R. B.; Newton-by-the-Sea	1949
Croal, Mrs J. B.; Raecleuchhead, Duns	1928
*Curle, F. R. N., W.S.; Greenyards, Melrose	1904
Dalziel, Mrs E. W. T.; Nether Hallrule, Hawick	1947
Darling, Adam D.; The Friars, Bamburgh	1923
Darling, R. Stormonth-, W.S.; Rosebank, Kelso	1936
Davidson, George E.; Godscroft, Duns	1946
Davidson, Mrs K.; Beal House, Beal, Northumberland	1948
Dewar, Dr Robert H.; 8 Castle Terrace, Berwick-upon-Tweed	1948
Dickson, A. H. D., C.A.; c/o British Linen Bank, West End, Edinburgh	1925
Dickson, Miss Marjorie B.; 7 Doune Terrace, Edinburgh, 3	1929
Dixon-Johnson, Cuthbert J.; Middle Ord, Berwick-upon-Tweed	1946
Donaldson-Hudson, Miss R., F.R.Hist.S.; Springwood Park, Kelso	1951

	Date of Admission.
Douglas, Mrs W. S.; Mainhouse, Kelso	1925
Dunlop, Mrs Clementina; Whitmuir, Selkirk	1933
Elder, David M'A.; 17 Castlegate, Berwick-upon-Tweed	1950
Elliot, Wm. Marshall; Birgham, Coldstream	1909
Elliot, Miss G. A.; Birgham, Coldstream	1936
Elliot, W. R.; Birgham, Coldstream	1936
Elliot, Mrs Walter; Harwood, Hawick	1939
Evans, Mrs H. M.; "Cleaddon," 13 Palace Street, Berwick-upon-Tweed	1949
Fairfax, Miss F. Ramsay; c/o J. Cook, Esq., W.S., 61 N. Castle Street, Edinburgh, 2	1931
Falconer, Mrs Agnes W.; Auchencrow Mains, Reston	1925
Fasson, Mrs L. C. B.; Lanton Tower, Jedburgh	1949
Ferguson, Miss J. J.; Ellem Cottage, Duns	1937
Fleming, George J.; Greenwells, Lauder	1946
Fleming, Miss H. B.; Greenwells, Lauder	1947
Forster, C. P., M.A.; 1 Quay Walls, Berwick-upon-Tweed	1934
Frere, Mrs; Gala House, Galashiels	1951
Furness, Sir Christopher, Bart.; Netherbyres, Eyemouth, Berwickshire	1932
Furness, Miss P. F.; Netherbyres, Eyemouth, Berwickshire	1950
Gauld, H. Drummond, F.S.A.Scot., 1 West End High Road, Auchtermuchty, Fife	1951
Gillon, Mrs N.; Abbey St Bathans, Duns.	1949
Gilmour, Lady Mary; Carolside, Earlston	1950
Glahome, Mrs Jean A.; St Mary's Place, Berwick-upon-Tweed	1938
Gordon, Miss C. M.; Stoneshiel Hall, Reston	1949
Grant, James G.; Hermitage, Kelso	1939
Gray, Miss M.; 7 Marygate, Berwick-upon-Tweed	1945
Grieve, Miss Jessie C.; Castlewood, Pomathorn Road, Penicuik, Midlothian	1924
Grieve, Mrs J. M., Commercial Bank House, Earlston	1950
Gunn, Rev. Peter B.; The Manse, Ancrum, Jedburgh	1923
Haddington, The Rt. Hon. The Earl of, K.T., M.C.; Mellerstain, Gordon	1947
Haggerston, Sir Carnaby de Marie, Bart.; Ellingham Hall, Chathill, Northumberland	1937
Hair, Dr Ralph R.; Vinegarth, Chirnside	1947
Hall, J. C.; Murmuran, Galashiels	1949
Hall, Mrs J. M.; Overhowden, Oxtan, Lauder	1951
Hamilton, Mrs C. B.; Lowood, Melrose	1949
Hardy, Miss E.; Summerhall, Ayton	1950

	Date of Admission.
Hardy, Mrs Emily W.; 11 Bailiffgate, Alnwick.	1939
Harrison, Mrs B.; Levenlea, Selkirk	1937
Hastie, Alex.; Ravelston, Chirnside	1937
Hector, E. O.; Dods, Lauder	1949
Hector, Mrs K. M.; Dods, Lauder	1949
Heggie, Mrs M. J.; 9 Poynder Place, Kelso	1951
Henderson, Mrs D. E.; Leadervale, Earlston	1949
Henderson, J. D.; Chester Dene, Belford, Northumberland	1937
Henderson, Miss M. M.; Woodlands, Coldstream	1950
Henderson, T. S.; Colville House, Kelso	1936
Herriot, David R.; West Croft, East Ord, Berwick-upon-Tweed	1948
Herriot, Miss Jean M.; West Croft, East Ord, Berwick-upon-Tweed	1926
Hetherington, James R.; 2 West Street, Berwick-upon-Tweed	1950
Hicks, Rev. William Barry, M.C., M.A.; The Vicarage, Berwick-upon-Tweed	1946
Hogarth, George Burn; Foulden Hill, Berwick-upon-Tweed	1931
Hogarth, George Gilroy; Commercial Bank, Ayton	1922
Hogg, N.; Victoria House, Wooler	1949
Holderness-Roddam, Mrs Helen M. G.; Roddam Hall, Wooperton, Northumberland	1926
Home, Lt.-Col. William M. Logan; Edrom House, Duns	1936
Home, Mrs D. L. Logan; Edrom House, Duns	1950
Home, Miss H. M. Logan; Silverwells, Coldingham, Berwickshire	1927
*Home, Sir John Hepburn Milne; Elibank, Walkerburn	1898
Home, Lady Milne; Elibank, Walkerburn	1930
Home, Miss Sydney Milne; The Cottage, Paxton, Berwick-upon-Tweed	1924
Hood, James; Linhead, Cockburnspath	1932
Hood, T.; Townhead, Cockburnspath	1937
Hope, Miss Katherine M.; Cowdenknowes, Earlston	1946
Horn, Mrs M.; Allerley, Melrose	1949
Horsburgh, Mrs E. M.; Hornburn, Ayton	1939
Hotham, Mrs G. M.; Milne Graden, Coldstream	1951
Howard, Mrs Mary L.; Greystone Cottage, Dunstan, Alnwick	1939
Hume, Miss F. E.; Hillview, Whitsome, Berwickshire	1949
Hume, J. L.; British Linen Bank House, Duns	1949
Hunt, Mrs E. A.; Greenwell, Chirnside	1946
Hutchison, Mrs Mary M.; The Chesters, Lauder	1947
Inglis, John; West Nisbet, Jedburgh	1948
*James, Captain Sir F., Bart.; Beech Grove, Ascot, Berks	1901
Jobling, Mrs M. A.; Scremerston Town Farm, Berwick-upon-Tweed	1949
Johnson, Miss E. G.; 7 Marygate, Berwick-upon-Tweed	1937
Johnson, Miss Eva E. R., M.A.; 7 Marygate, Berwick-upon-Tweed	1937

	Date of Admission.
Johnston, Robert G., O.B.E., Murray Place, Duns	1907
Joicey, The Hon. Lady; Old Richhurst, Dunsfold, Surrey	1939
Jopling, Mrs S. H.; Boathouse, Norham-on-Tweed	1951
Jopling, T. W.; Boathouse, Norham-on-Tweed	1951
Keenlyside, Ronald; 10 Bondgate Without, Alnwick	1933
Kelly, Henry; Bellshill, Belford, Northumberland	1937
Kelly, Mrs Maud; Bellshill, Belford, Northumberland	1937
Kennaway, Robert Owen; The Lodge, Lauder	1946
Kerr, Major F.; Fairlaw, Reston	1950
Kippen, Mrs M. J.; 33 Castle Terrace, Berwick-upon-Tweed	1948
Kitcat, Mrs J.; Hirsell Law, Coldstream	1950
Knight, Mrs W. A. T.; 1 Wellington Terrace, Berwick-upon-Tweed	1947
Laidlaw, W. B. R., D.Sc.; Biglawburn Gardens, Ayton	1949
Lamb, Rev. George; c/o Royal Bank of Scotland, West End, Greenock	1939
Leadbetter, James G. G., W.S.; Spital Tower, Denholm	1931
Leadbetter, Miss M. B. G.; Spital Tower, Denholm	1947
Leadbetter, Mrs E. M. G.; Knowesouth, Jedburgh	1932
Leadbetter, Miss S.; Knowesouth, Jedburgh	1937
Leather, Miss R. M.; East Pavilion, Paxton House, Berwick-upon-Tweed	1920
Leitch, J. S.; Longformacus, Duns	1948
Lindsay, Mrs; Arrabury, Ayton	1924
Lindsay, John Vassie; Cornhill Farm House, Cornhill-on-Tweed	1946
Little, Canon James Armstrong; The Vicarage, Norham, Northumberland	1946
Little, Miss Sarah; The Vicarage, Norham, Northumberland	1947
Little, Mrs Nora; Crotchet Knowe, Galashiels	1923
Loch, Mrs H. G. M.; House of Narrow Gates, St Boswells	1939
Longmuir, Rev. James Boyd, B.L.; Manse of Swinton, Duns	1946
Low, Miss Elizabeth L.; Douglas Cottage, Melrose	1946
Low, Miss K. M.; Bridgelands, Selkirk	1935
Lyal, Mrs Clara; 26 Forbes Road, Edinburgh	1925
Lyal, Mrs H. S.; Rocklyn, Lauder	1939
Lyal, Miss M. M.; 16 Spottiswoode Street, Edinburgh, 9	1935
Mackenzie, Mrs Helen B.; Tree Tops, Bowden, St Boswells	1939
M'Callum, Rev. Wm., D.D.; The Manse, Makerstoun, Kelso	1917
M'Cracken, Dr K. M.; 1 The Square, Kelso	1951
M'Creath, Mrs H. R.; Gainslaw House, Berwick-upon-Tweed	1928
M'Creath, Mrs W. R.; Cheviot House, Castle Terrace, Berwick-upon-Tweed	1938
M'Donald, Dr D. T.; South Bank, Belford, Northumberland	1937
M'Dougal, Capt. Arthur R.; Blythe, Lauder	1920
M'Dougal, Mrs H. Maud; Blythe, Lauder	1939

LIST OF MEMBERS

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	Date of Admission.
M'Dougal, J. Logan; Blythe, Lauder	1950
*M'Ewen, Captain John Helias F.; Marchmont, Greenlaw	1931
M'Ewen, Mrs B.; Marchmont, Greenlaw	1951
M'Keachie, Rev. Alfred, M.A.; The Manse, Chirnside	1923
M'Whir, Mrs M. H.; 2 Forrester Road, Corstorphine, Edinburgh, 12	1938
Maddan, James G.; Aldon House, West Malling, Kent	1922
Marshall, Rev. G. H.; St Paul's Vicarage, Alnwick	1949
Marshall, Wm. James; Northumberland Avenue, Berwick-upon-Tweed	1904
Martin, Colin D.; Friarshall, Gattonside, Melrose	1947
Martin, Mrs M.; Friarshall, Gattonside, Melrose	1929
Martin, Mrs Jessie D.; 13 Castlegate, Berwick-upon-Tweed	1949
Martin, Miss Margaret G.; 6 Louvaine Terrace, Berwick-upon-Tweed	1951
Mather, Mrs J.; Cairnbank, Horncliffe, Berwick-upon-Tweed	1948
Mather, Mrs J. C.; Westmains, Milne Graden, Coldstream	1947
Mauchlan, Mrs Eleanor M.; Homecroft, Horncliffe, Berwick-upon-Tweed	1928
Menzies, Mrs J. I.; Moorfield, St Boswells	1949
Middlemas, Mrs Catherine; Bilton Hill, Alnmouth	1928
*Middlemas, Robert; Bilton Hill, Alnmouth	1898
Middlemas, Mrs E. M.; Prudhoe Croft, Alnwick	1951
Middlemas, R. J., M.A.; Prudhoe Croft, Alnwick	1928
Milburn, Sir Leonard J., Bart.; Guyzance, Acklington	1927
Milburn, E. Walter; Craigview, Stow, Midlothian	1948
Miller, Mrs D. H.; Fairfield, Bamburgh	1949
Milligan, J. A.; Yetholm Mill, Kelso	1942
Mills, Fred; Mayfield, Haddington	1916
Mills, George H.; Greenriggs, Duns	1924
Mills, Mrs Isabella B. B.; Greenriggs, Duns	1946
Mitchell, Major C., C.B.E., D.S.O.; Pallinsburn, Cornhill-upon-Tweed	1938
Moffat, J. B., A.R.I.B.A.; 79 Main Street, Spittal, Berwick-upon-Tweed	1950
Moffat, Mrs M. G.; 79 Main Street, Spittal, Berwick-upon-Tweed	1949
Molesworth, Col. F. C.; Culworth, Bideford, Devon	1938
Morris, Miss W. J.; Easter Softlaw, Kelso	1951
Morton, Mrs H. S.; 3 The Wynding, Bamburgh	1949
Murdue, Alan J.; West Fleetham, Chathill	1947
Murray, Mrs Marian Steel; 8 Northumberland Avenue, Berwick-upon-Tweed	1946
Neilson, W. K.; Lintalee, Jedburgh	1933
Neilson, Mrs; Lintalee, Jedburgh	1933
Newbigin, Miss A. J. W.; 5 Haldane Terrace, Newcastle-on-Tyne	1946
Newton, T. A.; High Street, Wooler	1948

	Date of Admission.
Ogg, James E.; Cockburnspath	1921
Oliver, Mrs A. A.; Lochside, Kelso	1951
Oliver, Mrs Katherine; Edgerston, Jedburgh	1924
Otto, Miss Jane Margaret; Grey Crook, St Boswells	1931
Pape, Miss D. C.; Grindon Corner, Norham-on-Tweed	1933
Parker, Frederick; "Cabra," 12 Castle Terrace, Berwick-upon-Tweed	1936
Pate, Mrs; Horseupcleugh, Longformacus	1928
Paterson, James; Castlegate, Berwick-upon-Tweed	1927
Pattick, Miss Isabella B.; 14 Castle Terrace, Berwick-upon-Tweed	1950
Patterson, Miss Marjorie E.; Prudhoe House, Alnwick	1946
Peake, Mrs E. M.; Hawkslee, St Boswells	1946
Peters, H. R.; Alderton, Castle Terrace, Berwick-upon-Tweed	1938
Pitman, Mrs C.; 14 Oswald Road, Edinburgh, 9	1951
Playfair, Mrs M. J.; Liberty, Elie, Fife	1937
Plummer, C. A. Scott; Sunderland Farm, Galashiels	1950
Plummer, Mrs Joan Scott; Sunderland Farm, Galashiels	1950
Pool, G. D.; Underwood, Beechfield Road, Gosforth, Newcastle-upon-Tyne	1936
Prentice, Mrs J.; Swinton Quarter, Duns	1948
Pringle, Rev. Andrew; The Manse, Ladykirk, Norham-on-Tweed	1946
Purves, Miss E. J.; 18 Castle Terrace, Berwick-upon-Tweed	1948
Purves, Thomas; 18 Castle Terrace, Berwick-upon-Tweed	1923
Reid, Norman; Bank House, Chirnside	1951
Renilson, John, F.S.A.Scot.; 17 Headrig, Jedburgh	1949
Richardson, Miss S. D., 1 Devon Terrace, Berwick-upon-Tweed	1948
Riddell, Mrs Alice B.; Osborne House, Tweedmouth	1938
Ritch, D. T.; British Linen Bank, North Berwick	1936
Ritchie, Mrs Ishbel Juliet; The Holmes, St Boswells	1926
Robertson, Miss A. H.; Cawderstones, Berwick-upon-Tweed	1948
Robertson, Miss Ethel G.; Cawderstones, Berwick-upon-Tweed	1946
Robertson, Miss Janet E.; Cawderstones, Berwick-upon-Tweed	1946
Robertson, D. M.; Buxley, Duns	1950
Robertson, Mrs L. R.; Buxley, Duns	1950
Robertson, F. W.; 36 Hallhead Road, Edinburgh, 9	1941
Robertson, Wm.; Stamford, Alnwick	1923
Robertson, J. W. Home; Paxton House, Berwick-upon-Tweed	1947
Robson, Mrs F. E.; Ford Way, Horncliffe, Berwick-upon-Tweed	1950
Robson-Scott, Miss Marjorie; Newton, Jedburgh	1918
Rodger, Miss Jane B.; Ferniehurst, Melrose	1939
Roxburghe, Her Grace the Duchess of, Floors Castle, Kelso	1951
Runciman, Miss E.; Craigsford, Earlston	1937
Sanderson, C. W.; Birnieknowes, Cockburnspath	1937
Sanderson, Mrs F. B.; Wayside, Ayton	1925

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	Date of Admission.
Sanderson, Miss J. E. P.; Fernlea, Alnwick	1951
Sanderson, J. Martin; Linthill, Melrose	1929
Sanderson, Mrs; Linthill, Melrose	1929
Sanderson, Mrs M. C. D.; Northfield, Lowick, Berwick-upon-Tweed	1935
Scott, Miss A.; Spylaw, Kelso	1932
Sharp, James; Heriot Mill, Heriot, Midlothian	1923
Sharpe, Mrs Gladys R.; The Park, Earlston	1946
Shelford, Mrs E.; The Elms, 4 West Acres, Alnwick	1930
Short, David C.; Humbleton, Wooler	1946
Short, Mrs Eva D.; Old Graden, Kelso	1927
Sidey, Mrs A. R.; 4 Bridge Street, Berwick-upon-Tweed	1931
Simpson, Mrs Dorothy; 9 Doune Terrace, Edinburgh, 3	1922
Simpson, J. P.; Cooden Beach Hotel, Cooden, Sussex	1932
Smail, James I. M., M.C.; Kiwi Cottage, Scremerston, Berwick-upon-Tweed	1948
Smart, Mrs C.; Grosvenor Place, Tweedmouth, Berwick-upon-Tweed	1950
Smith, Mrs D. G. Wilson; Cumledge, Duns	1947
Smith, D. M.; Elmbank, Chirnside	1949
Spark, Mrs Liliass C.; Ellangowan, Melrose	1925
Spark, William; Ellangowan, Melrose	1923
Sprunt, Mrs B. R.; 52 Ravensdowne, Berwick-upon-Tweed	1937
Stewart, James; East Flodden, Wooler	1948
Steven, Alex. Cockburn Allison; "St Duthus," Berwick-upon-Tweed	1924
Stewart, Mrs J. B.; Faughhill, St Boswells	1934
Stodart, Charles; Leaston, Humber, East Lothian	1916
Stoddart, Miss A. Y.; Kirklands, Melrose	1933
Stott, Fred, junr.; 104 Marygate, Berwick-upon-Tweed	1950
Swan, Mrs A. G.; Rhuallan, Chirnside	1937
Swan, Mrs D. K.; Harelaw, Chirnside	1946
*Swinton, Rev. Alan Edulf, M.A.; Swinton House, Duns	1915
Swinton, Mrs E. K.; Swinton House, Duns	1923
Swinton, Brigadier Alan H. C.; Kimmerghame, Duns	1938
Tait, Mrs E.; Braeside, Kelso.	1951
Tait, T. M'Gregor; 45 Woolmarket, Berwick-upon-Tweed	1923
Tancred, Mrs D. H. E.; Weirgate House, St Boswells	1938
Tankerville, Lady; Chillingham Castle, Wooler	1939
Tate, Capt. George; Wellfields, Warkworth	1949
Tegner, Mrs H.; East Riding, Morpeth	1950
Thomson, Mrs A. D.; Nenthorn, Kelso	1928
Thomson, Mrs E. M.; 29 Hatton Place, Edinburgh, 9	1948
Thomson, James Allan, F.F.A., F.R.S.E.; 29 Hatton Place, Edinburgh, 9	1946
Thomson, Mrs Moffat; Lambden, Greenlaw	1934

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	Date of Admission.
Thomson, Miss Nora W.; Hazlemere, Kingsdown, nr. Deal, Kent	1937
Thorburn, J.; The Walls, Lauder	1950
Thorburn, Mrs M. B.; The Walls, Lauder	1950
Thorp, Collingwood F., B.A.; Narrowgate House, Alnwick	1923
Threipland, Mrs Eleanor Murray; Dryburgh Abbey, St Boswells	1929
Threipland, P. W. Murray; Dryburgh Abbey, St Boswells	1924
Turner, Mrs Grey; Huntercombe Manor, near Taplow, Berks	1933
Tweedie, James; 8 Suffolk Road, Edinburgh, 9	1920
Vallance, George; 1 Home Avenue, Duns	1934
Vernon, Lt.-Col. G. F. D.; St Rules, Dunbar	1950
Walker, Maxwell; Springwells, Greenlaw	1932
Walker, William; Marchlea House, Coldstream	1946
Walker, Wm. Buchanan Cowan; Marchlea House, Coldstream	1946
Walton, Rowland H.; Butterlaw, Coldstream	1951
Watherston, Mrs R. H.; Menslaws, Jedburgh	1939
Watson, Miss M.; Westfield, Yetholm, Kelso	1932
Webb, Charles; Longhorsley Tower, Longhorsley, Morpeth	1928
White, T. L.; Pathhead, Cockburnspath	1950
Wight, Mrs M. I. D.; Greenwood, Grantshouse.	1949
Williams, Mrs E. I.; Ferryside, Alnmouth	1950
Williams, S. O.; Ferryside, Alnmouth	1950
Willins, Miss E. P. L.; Kirklands, Ayton	1951
Willits, Mrs H. M.; 13 North Terrace, Berwick-upon-Tweed	1939
Wilson, Maj.-Gen. Sir Gordon; Meadow House Mains, Hutton, Berwick-upon-Tweed	1947
Wood, J. R.; Castle Heaton, Cornhill	1950
Wright, Mrs Margaret S.; St Leonards, Berwick-upon-Tweed	1947

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 Terrace, Edinburgh, 1
 National Library of Scotland, Parliament Square, Edinburgh, 1
 The Hawick Archæological Society, Wilton Lodge, Hawick
 The Scottish Historical Review, c/o Thomas Nelson & Sons,
 Ltd., Edinburgh, 9

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 The Editor, *The Advertiser*, Berwick-upon-Tweed
 The Editor, *The Guardian*, Alnwick
 The Editor, *The Border Standard*, Galashiels
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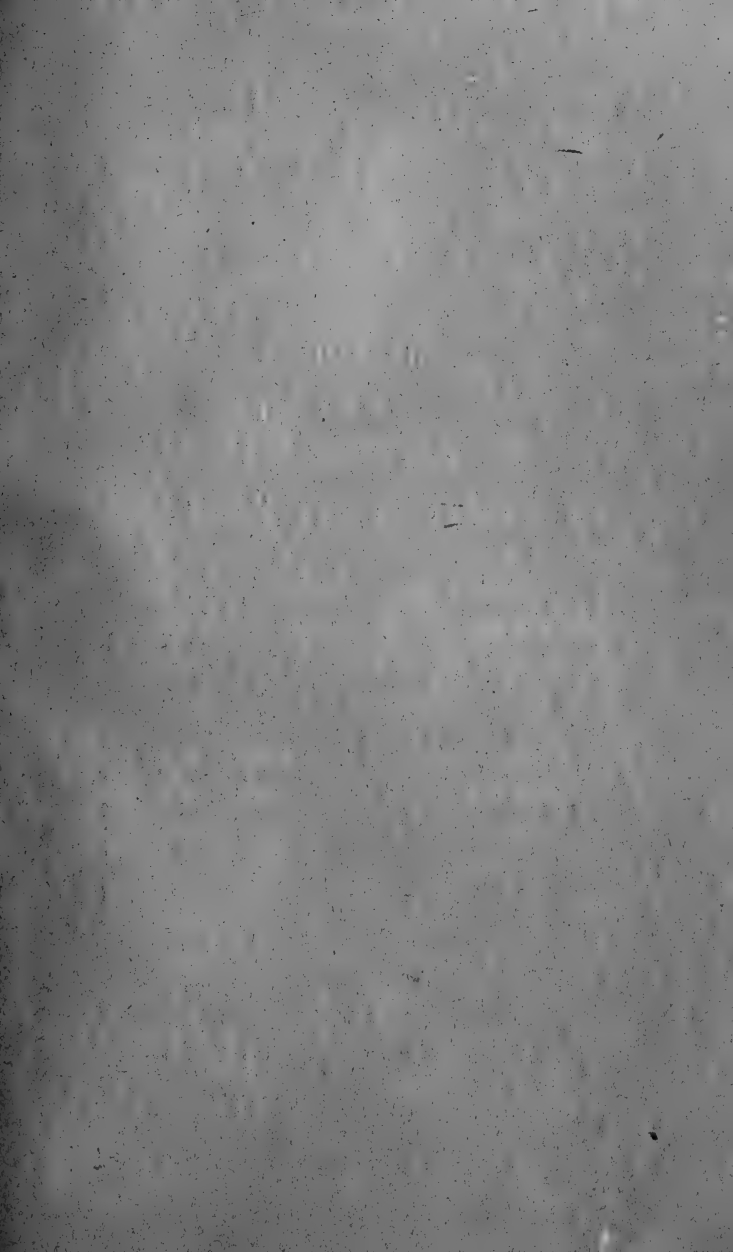
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OF THE
BERWICKSHIRE
NATURALISTS' CLUB

INSTITUTED SEPTEMBER 22, 1831

"MARE ET TELLUS, ET, QUOD TEGIT OMNIA, CÆLUM"

VOL. XXXII. PART III.

1952

Price to Members (extra copies) 7s. ~~6d.~~ 10/-

Price to Non-Members 16s. 15/-

EDINBURGH

PRINTED FOR THE CLUB

BY NEILL AND CO. LTD., 212 CAUSEWAYSIDE

1953

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ERRATA

Page 149.

For SIR CARNABY DE M. HAGGERSTON, Bart., *read* Sir H. CARNABY DE M. HAGGERSTON, Bart.

Page 150.

For (Amonagawa (*Lannesiana erecta*)) *read* (Amanogawa (*Miyoshi erecta*)).

Page 151.

For Now, in Britain, it is rather alarming to think that from the primitive man's worship of trees we have not reached a stage in the unconcerned destruction of timber.

Read Now, in Britain, it is rather alarming to think that, starting with the primitive man's worship of trees, we have not yet reached a limit in the unconcerned destruction of timber.

Page 151.

For is the Pine *read* is the Pine (*Pinus*).

Page 152.

For such a tree existed *read* such a tree once existed.

Page 152.

For Maiden Hair (*Ginhgo biloba*) *read* Maiden Hair (*Ginkgo biloba*).

Page 175.

For Crossman, Esq., of Chiswick, *read* Crossman, Esq., of Cheswick.

Page 184.

For Marveille du jour *read* Merveille du jour.





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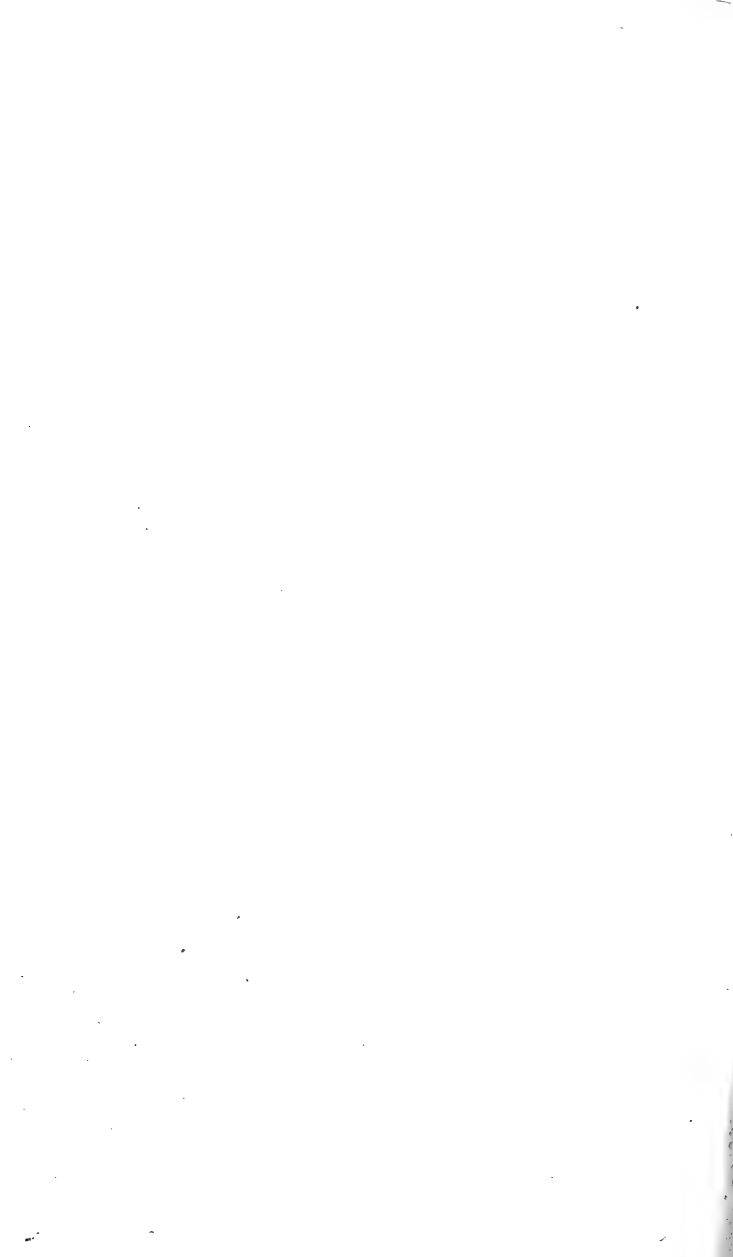
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PROCEEDINGS
OF THE
BERWICKSHIRE NATURALISTS' CLUB

TREES.

*Address delivered to the Berwickshire Naturalists' Club
at Berwick, 1st October 1952, by Sir CARNABY DE M.
HAGGERSTON, Bart.*

ON our summer field meetings we are privileged to visit some very beautiful places. Now why are these places so beautiful? I suggest that one reason may be their setting, with a background of trees. These trees have been planted by the hands of men, in order that the generations which come after may enjoy the fruits of their creation. The planting of trees may be termed a long-view policy when it is realised that it takes a conifer seventy years to reach maturity and a deciduous tree one hundred and twenty to one hundred and sixty. When I mention this span of life, I mean for the timber to be of commercial use. Of course, there are many trees in this country of a far greater age, but beyond looking picturesque they are of little practical value except possibly the Oak (*Quercus*); some of this species remain sound for an incredible length of time. Many trees which we see in private parks, etc., are not native to this country, but come from other parts of the globe.

They are grown here only if the soil is agreeable and they are given due care and help; their biggest enemy, perhaps, is our winter. In Great Britain we are not provided by Nature with many trees which flower or give autumn effects such as can be seen in warmer countries. To mention a few trees which flower and do well here without special effort on the owner's part, there are the Tulip Tree (*Liriodendron*) from North America, which turns yellow in autumn and flowers in June and July; another variety of the same species which has upright branches, called *Jastigiatum*; the Manna Ash (*Fraxinus ornus*) which flowers abundantly in May; also, of course, all kinds of Japanese cherries (*Prunus cerasus*) of which one of the most beautiful is, in my opinion, the Cherry Poplar (Amonagawa (*Lannesiana erecta*)).

For autumn colouring there are many trees and, given the right weather at the "back end," a wonderful display can be seen in red, orange or yellow, as, for instance, the American Scarlet Oak (*Quercus coccinea*) which in its own country is beautiful beyond words, as I can testify.

Many of you, in your home acres, must have an idle corner, or it may be your friends have, on which a few trees can be planted. The purchase of trees involves no great outlay when done in a small way. Surely within ourselves we have the creative sense; our wish is to reproduce in all forms.

Now how to reproduce a tree? There are various ways, *e.g.* by seed. The ordinary method is to sow seed by the row as we do in our gardens. Here mice and birds are our enemies, so the trees must be covered with red lead and then again with small branches so as to hold off these pests as well as the burning rays of the sun. Also they must be kept well weeded. These seeds remain there for two years, after which they are lifted and replanted with a spacing of five or six inches.

Thus they remain for two years more, after which they are ready for the forest. There they are still beset by enemies, the worst of which is the rabbit, and, in this part of the world, the deer. The rabbit can be fought by net and gas, but the deer calls for a fence six feet high. There are, of course, various kinds of diseases against which it is almost impossible to compete when planting on a large scale.

Another way of growing a tree is by grafting, but this, I am afraid, is too large a subject to elaborate on this afternoon. The third course is to allow Nature to reproduce herself, a process which we can help by affording our care.

Now, in Britain, it is rather alarming to think that from the primitive man's worship of trees we have not reached a stage in the unconcerned destruction of timber, when it is appreciated that, in the New World, fifteen thousand soft-wood trees are called on to produce one issue of an American Sunday newspaper, which on the average is thirty-six pages, or approximately a week's reading. In the fourteenth century the population of this country was about two million people, and cultivation was as much as met their needs. In other words, the rest of the country was one vast forest; so it remains to us as a chastening reflection what a number of trees have been felled to change the landscape from that of a densely forested island to a country which is now dependent on the importation of foreign timber.

The tree that is really native to this part of the world is the Pine; hardwood trees belong to the midlands and the south, where the remains of forests can still be seen, such as Sherwood Forest and the New Forest.

It is amusing to read letters in the Press, protesting against the activities of the Forestry Commission in re-clothing our hill-sides with trees. At the moment, of course, they have the appearance of being planted in rows, which they are. But with the thinning which

takes place after sixteen years these regular rows will be broken up. The shortage of timber in this country was felt as early as the seventeenth century, as mentioned by Samuel Pepys in his *Diary*, when the Navy had to import great quantities of timber in order to build our ships. This shortage occurred again in Nelson's time, when we were again in desperate straits. Admiral Lord Collingwood always had his pockets stuffed with acorns which he pushed into the ground whenever he happened on a suitable place.

An event of great interest to tree-growers took place three years ago when an Anglo-American expedition came across a small stand of the Dawn Redwood (*Meta sequoia*), a first cousin of the Wellingtonia (*Sequoia gigantea*). This tree had been lost to the world for sixty million years, though we knew that such a tree existed, as the fossils had been found in coal, etc. In a few localities in America and this country some specimens are now growing from seed which was brought back, and they have proved themselves to be of very rapid growth. To look at, they are very ugly trees, and in spite of being conifers they are deciduous. The only other prehistoric tree we have in our country is the Maiden Hair (*Ginkgo biloba*) which is, though it does not resemble, a pine. It, also, is deciduous.

The destruction of forests in Great Britain has not provided us with problems such as have arisen in other countries, *e.g.* the dust bowl in central North America (caused by erosion) or in the Sahara Desert, which was once mostly covered by forest as shown by fossilised remains. The Sahara at the moment is advancing southwards on a two-thousand-mile front at the rate of thirty miles a year, but an expedition is now going to try and arrest this advance by planting belts of trees.

I do not know if it has ever been really noticed that the climate of this land and of the whole of the northern part of the globe is becoming warmer. In Canada,

farmers are now planting grain where a hundred years ago it was too cold to work the land at all. In Norway also the tree-line is slowly advancing northwards, so that in a few generations we may have types of trees growing here which have never grown before. The annoying thing about all this is that, should the ice cap in Greenland go altogether, it will raise the ocean round our shores by four and a half feet. Yet this must have happened before, as, where the ice has gone back, the remains of prehistoric man have been found.

Reports of Meetings for the Year 1952.

1. THE first meeting of the year was held on Thursday, 22nd May, in the valley of the River Coquet, in weather which is now becoming, *absit omen*, proverbial. In the small hamlet of Holystone the President welcomed the large gathering, and in the Church of St Mary introduced the speaker, Mr H. L. Honeyman, Newcastle. While the church itself is not very ancient, the site on which it stands dates back to about 1272 when there existed there an Augustinian nunnery. Among several old tombstones in the churchyard members saw a mort-safe, for which there is nowadays no use. In the Burke and Hare Resurrectionist times it was used to anchor down a coffin and thus prevent body-snatchers from stealing the corpse.

The next point visited was the so-called Well of St Paulinus, sometime known as St Ninian's and later as the Lady Well. Mr Honeyman gave a history of the well, whose water, from subterranean springs, is always fresh.

After lunch in the vicinity of Harbottle Castle, the residence of Mrs Fenwicke Clennell, and a comparatively modern building, the party drove to Harbottle village, where, in the Presbyterian Church, the Rev. W. Mackie, B.A., Glanton, one-time Minister of Harbottle, read a paper on "The Presbyterian Church in the English Border Country and at Harbottle" (see p. 165). Members then made their way up to the ruins of the old Harbottle Castle, where Dr C. H. Hunter Blair, Newcastle, gave a general outline of the appearance of the building in its former state. He was followed by Mr Honeyman who described its architectural features. It was here that Margaret Tudor, daughter of Henry VII, became doubly the great-grandmother of James VI and I, when she bore a daughter to James IV.

The last feature of the meeting was a visit to the Parish Church of St Michael at Alwinton, where the Vicar, Rev. Mr Renwick, gave some details of the "bits and pieces" connected with the different periods of restoration, and Mr

Honeyman spoke on architectural points of interest. Finally, Dr Hunter Blair described the finding at Wark of a seal bearing the arms of the Clennell family, how he came into temporary possession of it and what happened when it left his care.

The meeting ended with tea in the County Hotel, Rothbury.

Six applications for membership were approved by the Club: Miss Elizabeth Chapman, Whitemire, Chirnside; Gilbert T. James, Sandford, Bamburgh; Mrs K. McLelland, Westerhousebyres, Melrose; William Renton, Castle Street, Duns; Thomas R. Turner, The Rowans, Ayton; Mrs Alice M. Veitch, Springbank, Berwick.

2. The second meeting was held on Thursday, 26th June, in dry but dull weather, which broke into "Club weather" later. At the stately and imposing pile of Duns Castle, some hundred and forty members and their guests met the President, and were welcomed by Colonel G. H. Hay, D.S.O. After the latter had outlined the history of the Castle, members were taken inside in three relays and were shown various items of great historical interest.

These included the original Duns area copy of the National Covenant, which bears the signatures of many of the local supporters of the Covenant, and was found amongst the archives of the Castle. The original Covenant was signed by dignitaries of Scotland at the Churchyard of the Greyfriars, Edinburgh, in 1638.

The many portraits exhibited included James VI and I, Prince Charles Edward Stuart, and Henry, Cardinal York. Other exhibits included a silver draughtboard which belonged to Mary, Queen of Scots; a Royal Standard rescued by Edward Hay at the Battle of Worcester; a beautifully printed missal with the arms and name of George, Lord Seton, its original owner, stamped on the binding. (Of this nobleman, a loyal adherent of Mary, Queen of Scots, Colonel Hay is a direct descendant.) Among several fifteenth-century Books of Hours one is especially interesting and important, as it bears internal evidence of having been owned and used in Scotland (*History*, vol. xiv, p. 59).

Members were also shown the room which General Leslie used as his headquarters in 1639.

As each relay finished in the Castle the three Araucarias in the gardens were visited, and there was some speculation as to which was the female and which were the two male trees. Planted in 1861, their dimensions were recorded in 1880 and 1892 (when the Club last visited the Castle) and it will be of interest to hear what progress has been made in the last sixty years.

After lunch in the grounds, members were taken by the Vice-President to the top of Duns Law, with a short halt at the Bruntons (Burnt Town), the original site of Duns. At the top, Mr Johnston gave a realistic account of where the Army of the Covenant, under General Leslie, lay in 1639, and members saw the large sandstone block where the Standard of the Covenant was planted. The chief points of interest visible from the top were shown, such as the battle-field of Halidon Hill (1333), but a grey light obscured any view of the Cheviots.

The next stage was the Parish Church of Duns where the Rev. Mr Douglas spoke and showed some photographs of the church before and after it was burned down.

The final venue for the day was Manderston, some three miles from Duns, the very beautiful home of Major and Mrs Bailie. This was the first occasion on which the Club has been here. After an account had been given by the owner of the various points to be noticed both outside and in, and which he referred to jokingly as being "pre-fabricated," not in the modern sense of the word, but rather in that everything was specially and carefully designed and executed to the smallest detail, members were taken round the chief rooms by Major and Mrs Bailie.

In the inner hall there were displayed sketches and photographs of the house at different periods showing the changes that had taken place; also two large slabs of alabaster which, when the sun shone through them, revealed beautiful colouring. Marble facings to doorways were prominent, while the doors themselves (of beautiful mahogany) show that old characteristic of good workmanship by their perfect fitting of the spaces. In the hall, the diningroom, the drawingroom and the ballroom attention was drawn to the ceilings, marble fireplaces, floors and silk-paper walls; a range of bookshelves in the billiard

room proved to be a secret door. Two cabinets containing Worcester and Crown Derby china were also seen, and in a corridor leading to the "Round Room" a cabinet containing miniatures in silver of various pieces of furniture. One of these pieces has the honour of a place in the Queen's Dolls' House.

Visits were paid to the gardens and the magnificent range of hothouses; also to the dairy, where the cows are milked by electricity. A special feature of the buildings here is the "Marble Dairy," whose walls are formed of marble brought from seven different countries, while above is a pele (built in 1895) containing a small panelled tearoom. From the roof there is a wide view of the Borders from the Lammermuirs to Cheviot and from Ruberslaw to Berwick.

The following ten applications for membership were approved: A. Gordon Shirra Gibb and Mrs Norah Shirra Gibb, Ferniehirst, Galashiels; Mrs E. I. Graham, Cornhill-on-Tweed; Rev. J. M. C. Hannah, The Rectory, Selkirk; Rev. S. Lipp, Longformacus; Miss F. C. McConville, Tintagel House, Berwick; Lieut.-Col. A. A. Macfarlane-Grieve, M.C., Canonbie; A. Mauchlan, Horncliffe; Miss J. Thompson, Horncliffe; and Mrs M. Todd Wells, Berwick.

Certain additional points regarding the architecture, etc., of Manderston may be noted:

- (a) The central part of the house on the south side is the original (three to four hundred years old).
- (b) The north end was rebuilt by Sir James Miller (uncle of Major Bailie) and finished in 1905.
- (c) The west wing was also added by him, joining what was then stables, and is now garage, laundry and four flats.
- (d) The stables were built by Sir James Miller in 1895.
- (e) The farm and dairy were remodelled, also in 1895.
- (f) The byre entrance contains the cloister, probably of Italian architecture.
- (g) The architect of Sir James Miller was Mr Kinross: the stone used in his time for rebuilding and new construction was hewn at Swinton Quarries and dressed at West Lodge. But the stonework of the South Lodge, built in Sir William Miller's time (father of Sir James), is supposed to have come over from Russia as ballast to Leith.

3. The third meeting, on Thursday, 17th July, was the first ornithological meeting held by the Club for many years, and was favoured by "Club weather." There was a very good turn-out of almost a hundred members and guests, and many members lunched on the bank of the Breamish river, three miles north of Glanton. The following birds were seen here: rooks, jackdaws, starlings, greenfinches, chaffinches, linnets, pied wagtail, blue tit, whitethroat, swallows, sandmartins, redshanks, oystercatcher, lapwings.

A red squirrel was also seen at the roadside about five miles north of the Breamish. At 1.15 the party assembled at Glanton, and were met by Mr and Mrs Noble Rollin, who explained the work of the Bird Station, and the method of working with the electrical photographic recorder—an ingenious machine which registers the actions of tits feeding at a trap outside the house. Another trap operated from inside the house—by the mere turning over of a switch—cuts off the visitor, the other end having a section for examination and ringing.

Charts showing the "dawn to dusk" chorus of birds were exhibited on the walls inside, one report coming from China and others from Honolulu and New Zealand. The party was then conducted round the aviary, where a number of interesting caged birds were seen, including a silver pheasant. Several unusual types of domestic fowls with chicks were in evidence, as well as Cayuga ducks, some pure bred, others crossed with Khaki Campbells.

In the two-acre grounds only one pair of blue tits actually nested, whereas about fifty of this species appeared in autumn and winter. Mr Rollin mentioned that he had observed that the blue tits fed their young five hundred and seventy times in a day. The food appeared to be mostly caterpillars, thus proving how useful these birds are to horticulturists. A willow-warbler's nest, in a very unusual position, was shown. The nest was placed in a wall three feet above the ground. A pair of robins had also nested in the same wall seven feet away.

Tea was provided by Mr Rollin in the cottage, outside which a pair of spotted flycatchers had reared a brood in a nest-box.

At this meeting a former rule of the Club (1925) was re-introduced, whereby a member hands in a slip with his or her

name and also number of guests. This has been done with a view to ascertaining, if possible, the numbers of "real" ornithologists, as against those attending as for an ordinary field meeting; the names of the former being checked over in the Roll which the Secretary is endeavouring to make up, in terms of instructions at a former Annual General Meeting. It may be stated that he has already encountered considerable difficulty, through members either (a) forgetting to return the specially printed post cards, (b) forgetting to sign them, (c) omitting to mark the sections in which they are specially interested, (d) failing to stamp their replies with a three-halfpenny stamp.

4. At the fourth meeting, on Wednesday, 20th August, about seventy members and their guests met the President to make an ascent of Cheviot. The six-mile drive up the picturesque College Valley from Hethpool, on the English side of the Border, took place in rather damp weather, for the hill-tops on either side were wreathed in mist, which looked like spoiling the day for a possible view at the top.

The highest point at which cars can find room to park is at Dunsdale, where a shepherd's cottage nestles in the hills, though the road continues up to Goldsclench, ending at another cottage and small farm. After a picnic lunch, most of the party started for the top under the guidance of the Vice-President. Others, not so energetic, killed time by walking to Goldsclench. By the time the top was reached (2676 feet above sea-level) the mist had all cleared away and there was a magnificent view all round the perimeter.

As cars were left at Dunsdale, their drivers had to return there and, later, pick up their passengers at different points in the valley. Of one group, indeed, the whereabouts was unknown for some time until they were located by telephone: they had crossed into Scotland and had come down in another valley near Sourhope on Bowmont Water. It was calculated that they must have covered about six extra miles; and these not on a smooth road, or a straight, or a level one.

A quorum of members, in a secluded part of the hills, approved the application of Mr Bernard A. Parkes, Spittal, for membership.

5. At the fifth meeting on Thursday, 18th September, members went outside their Border orbit to objectives which they had never visited previously. They had their usual "Club weather," but this time an unusual very cold north-westerly air made coats essential. Some ninety members and guests met at the College Church of St Matthew, commonly called Rosslyn Chapel, Midlothian, where the Curator, Mr John Taylor, F.S.A. Scot., described the scene. Attention was drawn to the truly marvellous carving on pillar, wall and roof and to the stained-glass windows.

Part of the afternoon was spent in Roslin Castle nearby, where Mr Charles S. T. Calder, F.S.A.Scot., of the Royal Commission on Ancient Monuments, told members of what had been there in past centuries by the evidence of what is left to-day.

The somewhat bald fact that the Club has visited such and such a place as the above on a stated date does not seem adequate for the records in the Club's *History*. And yet to do proper justice to each of these historic buildings would require reams of paper. And if all such were covered, that would imply having delved into records or stolen someone else's thunder, thus bringing down on the head of the Editor an action for breach of copyright. Such authoritative information as is already available for both the above places goes into such detail that it would be impracticable to include it here. And yet, for the benefit of both present and future members, there must be some indication of the source of that information. The recommended book is *Rosslyn*, by Will Grant, F.S.A.Scot. (Macniven and Wallace, Edinburgh).

In the second half of the afternoon members drove to Newbattle Abbey College, near Dalkeith. Here the Warden, Dr Edwin Muir, and the Secretary, Mr K. A. Wood, conducted them round. Dr Muir gave an interesting account of the Abbey, which had belonged originally to the Cistercians, and which, with Victorian additions, was handed over by the late Marquess of Lothian to the four Scottish Universities as Trustees, for use in adult education on a great variety of subjects.

Newbattle is meanwhile the only Adult Educational College in Scotland, and exists particularly for the benefit of those who have already followed courses in adult education and who wish to pursue their studies further. There is a close relation-

ship between tutor and student, as they live in the same house, that is both inevitable and natural. And emphasis is laid on habits of independent thought as much as on the acquisition of knowledge.

There are many fine portraits in the rooms both of members of the Lothian family, who resided here for over four centuries, and also of James I and Charles I, the latter by Van Dyck and occupying almost the whole front wall of the drawing-room.

In the Abbey Chapel members saw the reputed baptismal font of Mary, Queen of Scots, which was discovered at Linlithgow Palace, and a block of coal which was the first mined by the monks in Scotland. The beautifully laid-out gardens show the result of much attention and labour. They contain an ancient tree, which in the course of time has split into seven or eight smaller ones.

The day's meeting finished with tea at the Stair Arms Hotel.

Note.—An ancestor of the Secretary, Wilhelm de Caldenhed, was a monk in the Abbey about 1486, when he signed his name as witness to a charter.

6. The Annual Business Meeting on Wednesday, 1st October, was preceded in the forenoon by a visit to the Parish Church of Ancroft, where the Vicar, Rev. J. E. Wright, M.A., gave an interesting talk on its history (see page 173 *infra*). Only twenty-two members were present. At the entrance to the churchyard, Mr Watson, the local schoolmaster, pointed out to members the site of the original village before it was abandoned after the plague had visited Ancroft and neighbouring villages in the reign of Queen Anne. No excavations are permitted even to-day on the site, as there might be a danger of the "poison" still clinging to buried objects.

In the afternoon the Business Meeting was held in the King's Arms Hotel, Berwick, when forty-seven members were present. The retiring President was in the Chair until after he had read his Presidential Address on "Trees." Thereafter he appointed as his successor, Mr Robert George Johnston, O.B.E., Duns, handing over to him the Club Flag, and nominated Mr James Paterson, Berwick, as the new Vice-President. Mr Johnston then took the Chair, and thanked members for the honour

they had shown him in appointing him President, stating that he was the third member of the legal profession in Duns to have achieved that distinction. He promised to do his best for their interests in the coming season. After thanking Sir Carnaby Haggerston for his Presidential Address, which the latter acknowledged, the business of the meeting was proceeded with.

Thirteen apologies for absence were intimated by the Secretary, who then read his Report for the past season. He stated that at the end of the Club year the total membership stood at three hundred and thirty-six. During the year there were ten resignations and eight deaths, and five names were written off as defaulters; sixteen new members joined. On a call from the Chairman for the approval of the Report this was given unanimously.

The Treasurers' Report was read by Mr Purves, who recorded his thanks to the Auditor for his continued services and help. This Report, which was also approved, appears on page 196 *infra*.

The Office-bearers having resigned automatically, the retiring President proposed that they be re-elected *en bloc*, and this proposal was carried unanimously.

One application for membership, handed in that day by Mr William Gibson, J.P., Warkworth, was approved.

The Club's representation at the 1952 Conference of the British Association—which had been remitted to the Council at the last Business Meeting—having been carried out by Mrs M'Whir, she was unanimously reappointed to represent the Club at the 1953 Conference in Liverpool.

A protest by a member as to the "frequency of meetings in England" was mentioned by the Secretary, who stated that, in his letter of acknowledgment, he had informed his correspondent that, by the distribution of the membership living near the Borders, field meetings were arranged for alternate years as: Scottish side, 3, English side, 2; English side, 3, Scottish side, 2.

The Secretary also quoted a letter from another member, in the Kelso district, to the effect that some meetings were held beyond the original orbit of the Club; and contrasting the convenience of Berwick members having a bus "laid on" as

against other members who had to expend private petrol. As regards the bus, Mr Purves suggested that this or some other member from the Kelso district might be willing to arrange for a Kelso bus to pick up members round that area. The Chairman then proposed that, as the question of field meetings was one of the Council's responsibilities, this meeting should remit the matter for its decision. This was agreed to.

A third member brought up the question of the Club's admission to College Valley at the August meeting having been by Club badge. He was informed by the Chairman that the Sutherland Estates Office had had to lay down a condition of entry to the Valley by special permit—which in the case of the Club was relaxed by the use of its badge—owing to the continual damage done by trippers. If the member would communicate with the factor, Mr Campbell, at Wooler, he would have no difficulty in obtaining access to the Valley. The Secretary mentioned that he understood that, though there was a right-of-way in the Valley, this did not include the private road from Hethpool which had been constructed by the proprietor; hence the need for permits.

The Editing Secretary drew attention to a letter he had received from a member "across the Border," in reply to one he had written him as to the scope and functions of the Club under present-day conditions. In this letter the member indicated that despite the greatly increasing popularity of archæology, it was at the same time becoming more and more an "exact science," with excessive specialisation and over-centralisation. In consequence, all but the half-dozen larger societies throughout the country were "feeling the draught" financially, and their publications had ceased to hold their place as "source-books." But that in his view, in a middle-brow way, the Club could, by its field meetings, *still* serve as a focal point for local archæological enthusiasts, while on the Natural History side the true amateur had *still* the ball at his feet and could help to fill the ominous and growing voids in the archæological area.

The member concluded his letter by suggesting that a combination with adjacent societies, especially in the printing of reports, might make for greater economy. The Chairman suggested that the general points touched upon would more

properly be brought up by Mr Buist at the next Council meeting, and this the latter agreed to.

This was all the business, and after a vote of thanks to the Chairman, members dispersed for tea in the hotel. A photograph of some of the party was taken in the garden by a representative of the *Berwick Advertiser*.

THE PRESBYTERIAN CHURCH (*a*) IN THE ENGLISH BORDER COUNTRY, (*b*) AT HARBOTTLE.

By Rev. W. MACKIE, B.A.

THERE are to-day sixty-eight congregations of the Presbyterian Church of England in the County of Northumberland, and it is natural to suppose that proximity to Scotland has something to do with their existence in such numbers. Some of them were founded by and for Scottish emigrants to England, but many are wholly English in origin, having survived since the days when the Presbyterian Church was a powerful force in English life.

The English Presbyterian Church has, in fact, as long a history as the Church of England, going right back to the early days of the Reformation. By the time of Elizabeth, Presbyterian influence was strong and increasing until it was checked by the Act of Uniformity of 1559. Many clergy refused to conform, and were deprived of their livings, but a number of them continued to hold services where they could, using the Geneva Service Book. While Elizabeth continued, for political reasons, to suppress any deviation from the Anglican order, Parliament, with the support of many clergy, continued to press for a greater measure of reform on Presbyterian lines. Thus, in 1572, a Bill to empower the Bishops to permit their clergy to use rites and ceremonies similar to those of the French and Dutch Reformed Churches was passed by the Commons, but vetoed by the Queen. In the same year, a Presbytery was organised in Wandsworth, and a Directory of Worship and Discipline was drawn up, based on those of the Churches of Scotland, Geneva and France. In the hope of getting this Directory legalised, five hundred clergy addressed a petition to the Queen, but she replied by enforcing the Act of Uniformity more severely and setting up a Court of High Commission with power to suppress the Presbyterians by stringent means. Yet

the reforming movement continued to spread, and evidence given to the Commission indicates the existence of Presbyterian organisations in many parts of England. Further repressive measures were introduced; it was made impossible for the reformers to print any literature, and nonconformity was punished by banishment. Many Presbyterians fled to America and Holland, and the flight continued up to the reign of Charles I, to escape the savage punishments of the Court of the Star Chamber.

Many more petitions for the reform of the Church were presented to the Long Parliament in 1640, and in the following year a Bill to exclude the Bishops from Parliament was passed by the Commons but thrown out by the Lords. In 1641, however, after the King's incursion into the House, the Bill depriving the Bishops of their seats became law, and in 1645 an Act was passed abolishing episcopacy altogether.

To establish a new non-episcopal order and to ordain ministers, an Assembly was constituted to meet at Westminster in 1643. Commissioners were sent to Scotland, and they entered into a Solemn League and Covenant, "to preserve the reformed Church of Scotland and to reform religion in England and Ireland as in the best Reformed Churches, and to extirpate popery and prelacy."

Presbyterianism had now become the established religion in England, and the Westminster Assembly embarked upon its task of putting the law into effect. It produced first a Directory of Church Government, then a Directory for Public Worship. Doctrine was set forth in the Confession of Faith and the Larger and Shorter Catechisms, which are still the Subordinate Standards of the Presbyterian Church of England. The form of Church government was, however, already being opposed both in the Assembly and in Parliament by the Independents and Baptists, and Parliament, as the civil authority, wanted to have control also of the Church, to which the majority of the Assembly would not agree. These differences were temporarily composed, and by 1646 a fairly thorough Presbyterian organisation was working in London, with Sessions, Presbyteries and a Synod comprising a hundred and thirty-nine congregations.

Further dissension arose over the question of toleration. The Presbyterians insisted on uniformity, with some provision for tender consciences within the established Church. In-

dependents and Baptists wanted toleration for any genuine reforming party. The Presbyterian majority was able to get its way, but only at the cost of embittering the Independents. Cromwell and the Army became the centre of this opposition, and were soon strong enough to drive the Presbyterian members out of Parliament, so that the Presbyterian movement thereupon ceased to be constitutional and became revolutionary again. The chief reason for the failure of the Presbyterians to consolidate their position was their lack of competent leaders. Unlike Scotland, where Parliament, nobility and gentry worked for the most part together with the Church, the English Presbyterians suffered almost from the start from a lack of such support. Without their natural leaders, the people hesitated to take an active part in the Church, leaving all the organisation to the ministers, who did not make a very good job of it.

On the death of Cromwell (1659) the Presbyterians allied themselves with the Royalists. They made overtures to General Monk, who marched from Scotland to London and recalled the old Long Parliament, which met in 1660 with the original Presbyterian members reinstated. Presbyterianism was again declared the established faith and order of the Church of England; but Monk, having already betrayed his former Independent friends, now betrayed the Presbyterians, assuring Charles II that he would get him restored to the throne without having to accept any conditions. The old constitution in both Church and State was in fact restored. Bishops returned to their sees, and there were disputes in many parishes as to who was the rightful incumbent. The Presbyterians were fobbed off with promises of a reasonable compromise until 1662, when a new Act of Uniformity required all ministers to be re-ordained by a diocesan Bishop, to accept everything in the Prayer Book and to renounce the Covenant. About two thousand ministers refused to conform and were ejected from their churches. Their efforts to keep their congregations together outside the Anglican order were nearly all frustrated by the Conventicle and Five Mile Acts, but some congregations were re-established outside the five-mile limit, and a number of them still continue to-day, including four in Northumberland: North Shields, Great Bavington, Longframlington and Birdhopecraig.

Things became a little easier with the accession of William

of Orange. The Toleration Act of 1689 exempted Dissenters from the worst of the penalties of the Uniformity Acts, and permitted them to worship in houses licensed for the purpose. Between the Toleration Act and the reaction under Queen Anne (1710) nearly a thousand meeting houses were in use, many being Presbyterian and the rest Independent and Baptist.

During the reign of Queen Anne there was a High Church reaction, and further penalties were imposed on Nonconformists, excluding them from all public offices and prohibiting them from entering the universities. About this time many Presbyterians began to drift towards Unitarianism. Presbyterian oversight was impossible, and since, unlike the Independents, they were not answerable to their congregations, there was no restraint on a minister's views, particularly in those cases where the living was endowed, so that the minister was not dependent on the congregation's givings for his stipend. Thus in 1689 there were five hundred Presbyterian congregations, but in 1772 there were only a hundred and fifty which had not disappeared or become Unitarian. In London and the North some churches were saved from heterodoxy through being supplied by ministers trained in Scotland, and in Northumberland only two of the original English Presbyterian congregations lapsed into Arianism.

For two hundred years before this time, Northumberland had enjoyed the services of ministers from Scotland, and their influence, together with the lawless state of the Borders in those days, made it very difficult for the authorities to enforce the various repressive acts in this part of the country. Many congregations were, therefore, able to continue in the true Presbyterian tradition when most of the indigenous English Presbyterian congregations were persecuted out of existence or ceased to be Presbyterian.

An early reference to Scottish influence in the North of England is found in a report on the Diocese of Durham for the year 1565: "Many parishes have no priest, unless it be vagabond priests from Scotland who dare not abide in their own country." In 1584 Sir John Forster, Warden of the Middle Marches, wrote to Walsingham, Secretary to the Crown: "There is a great number in these parts infected with the alteration of religion, and in it they have the backing and comfort of Scotland."

Bishop Tobie of Durham complained in 1597 of the difficulty of enforcing the Act of Uniformity in Northern England: "It is intolerable that any subject of the Queen should for twenty or thirty years together stand out against civil or ecclesiastical authority and withhold themselves, their wives and children, from all Christian subjection to their natural sovereign; the toleration whereof hath been the very bane of religion in these parts." Some seventy years later, the persecution of the Covenanters in Scotland drove a number of them to seek refuge on the English side of the Cheviots. Two of the best known in these parts were Peden and Veitch, who used to preach in the valleys of the Rede and Coquet.

Further strength was added to Presbyterianism in England by a number of influxes of Scots following the various secessions from the Church of Scotland, and there were a hundred U.P. congregations in different parts of the country which in 1876 became incorporated in the Presbyterian Church of England.

The Presbyterian Church of England to-day is glad to acknowledge her past debts to Scotland, but at the same time the survivors of the original and indigenous English Presbyterian Church like to remember that their congregations have always been English, even though they were for a time dependent upon Scotland for the provision, or at least the training, of their ministers.

During the Commonwealth there were two Presbyterian ministers at the Parish Church of Alwinton. Alexander Martin was placed there by Cromwell in 1657, having been approved by the Newcastle Classis (Presbytery). A petition (now in the Public Records Office) addressed by Martin to Cromwell gives a picture of the state of affairs in the Border country at that time:—

To his Highness the Lord Protector of the Commonwealth of England, Scotland, Ireland, etc.

The humble petition of Alexander Martin, Minister of Alwintoune, in Northumberland,

Sheweth,

That whereas it hath pleased your highness to present the petitioner to the vicarage of Alwintoune, and the Commissioners for approbation of publick preachers have admitted him to the

said place where he hath served now almost a yeare without any settlement of means, that being in your highness power (the vicarage amounting to no more than twenty nobles a yeare). And that times out of mind there hath not been a settled minister in the place except one of late whom the propagators of the Gospell allowed four score pounds per annum, but being under many disadvantages he left the place. So that a great people there are lying in grosse ignorance and wanting all encouragement both of maintenance and habitation for a minister among them, must continue in that woeful state, unless your highness provide a remedy. Wherefore your petitioner humbly beggeth your highness will please to consider of it that (there being in that parish seven or eight score pounds a yeare of impropriated tithes of delinquents now under sequestration) a comfortable subsistence may be provided for a minister in that darke place that so many poor soules may no longer perish for want of knowledge, and your highness petitioner may pray, etc. There are in the place above a thousand people and there is no house either for a minister proper or to be hired for money.

This petition is subscribed as follows:—

Whitehall, Aug. 7, 1657.

His Highness specially commendeth this with the annexed to the consideration of the privy Councill that by them an augmentation may be settled by them, such as to them may seem most equall.

(signed) NATHL. BACON.

Certificate annexed:—

These are to certifie any whom it may concerne yt Mr. Alexander Martin hath been referred to the tryall of other Ministers of Newcastle and myself, and we very well approved him for Abilitie and Pietie. And that he hath (upon my Knowledge) very great discouragment in Allington (the place where he preacheth) having but twenty nobles a year and no house at all to live in, it being among ye Mosstroopers, and therefore needs all encouragment (as I humbly conceive) very few or none that are able ministers being willing to accept ye Place.

All this I write is from the impulse of my own spirit, not being so much as desired by him.

(signed) THO. WELD.

This certificate is the same in import as that which probationers to-day are required to obtain from Presbytery after their Trials for Licence and Ordination.

The Thomas Weld who signed the certificate was a minister in Gateshead. He was ejected for nonconformity in 1662, as was Mr Strong, the second Presbyterian minister of Alwinton.

The earliest record of the existence in the district of a separate Presbyterian cause is found in the Register of Licensed Meeting Houses, which includes one at Netherton in 1701. Harbottle Meeting was founded in 1713, the minister being James Bell. The congregation met in a house licensed for the purpose on the site of the present Cherry Tree House in the village, and is entered in the Evans MS., 1716, as "Coquet Water, James Bell, hearers 250, county voters 3." James Bell is also mentioned in *Parochial Remarks on his Visitation*, by Bishop Chandler, 1736: "Fam. 223, of which 100 Presb. 28 Papists meet at Biddlestone. 8 licd. meeting houses where is service and catech. The chief is at Harbottle, a m. from the Ch. where is service 3 successive Sundays and ye 4th at Windyhaugh, 5 m. from ye C. James Bell, Teacher."

In 1736, John Dixon, precentor, clerk and treasurer of Harbottle Presbyterian Church, began to keep records on odd bits of paper and the backs of bills. These papers, since bound, constitute the records of the congregation from 1736 to 1760. They are now in the archives at Presbyterian Church House, London. John Dixon records thus the ordination of Mr George Scott: "Mr. George Scott was ordained at Harbottle Dec. ye 7th, being Tuesday, 1736, by Mr. Thos. Willis, Minister at Branton, who preached the ordination sermon. He also gave the charge. Ministers who imposed hands besides Mr Willis were Mr. Jas. Chisholm, Minr. at Birdhopecraig, Mr. Jas. Oliver, Minr. at Framlington, Mr. Hugh Kenedy, Minr. at Cavers, Mr. Wm. Turnbull, Minr. at Abbotsrule."

A new meeting house was built in 1755 on the site now occupied by the church. It was a plain, square building with a thatched roof. This building lasted until 1854, when it was condemned as unsafe, and the foundation stone of the present building was laid. The interior was reconstructed in 1923, giving the building its present form.

Many of the members live a long way from Harbottle, up to

twelve miles, and in former days it was the practice on Communion Sundays to make provision out of church funds for the physical needs of those who had travelled a long distance. Thus an entry in John Dixon's records reads: "May 25th, 1741. Outlays at the Sacrament—6 gallon drink, 5/-. Bread, 4/2. Cakes 7/-. 9 quarts wine 12/6d. Brandy 3/-. Cheese 3/9. Butter 1/-."

ANCROFT CHURCH.

By Rev. J. E. WRIGHT, M.A.

ANCROFT is one of the four chapelries which the monks of Holy Island, Lindisfarne, established on the mainland, the others being Kyloe, Lowick and Tweedmouth. The churches in these places were built early in the twelfth century; I have seen 1089 given as the date for Ancroft.

The earliest historical reference to these churches is found in 1145, when there was a dispute between Pope Eugenius III and the Prior of Holy Island as to the right of presentation.

The church, said to have been founded by Papedi, is dedicated to St Anne and for many years a Feast was held on the last Sunday in July, St Anne's Day being July 26th—in recent years a flower service has been held.

In Ancroft Church alone of the chapelries mentioned above are there remains of the original Norman building: the south wall of the present nave to the west of the buttress: the old Norman doorway (blocked up when the west end of the church was converted into a pele tower): the undermost part of the present tower, and the original round-headed window in the west wall. This can be seen by the crenellated stone-work still *in situ*.

The date of the tower is put somewhere in the fourteenth century, probably about 1320, when this part of the Borders was continually raided by the Scots. When the tower was built, the west end of the church was unroofed as far as the low entrance, which was blocked by a thick wall running across the church from south to north, while all the other walls were doubled in thickness by building on the inside.

Entrance into the tower seems to have been from the inside of the church by means of a door on the first floor opposite to the present tower room or vestry. A very curious low S-shaped narrow entrance has been discovered in the north-east corner of the tower only large enough to admit one person at a time and

made with a turn as shown in the architect's plan previous to the restoration in 1869.

The building thus became half church and half a Border pele tower, or place of refuge for the inhabitants of the village. In consequence of Scottish raids the population became small and the land uncultivated.

In the accounts kept by the Prior of Holy Island, now in the Dean and Chapter Library at Durham, a very frequent entry is to the effect that there was no tithe from one or other of these chapelries because of the raids of the Scots.

After the suppression of the monastery, when its yearly income is stated by Dugdale to have been £48, 18s. 11d., little or nothing is heard of any of the chapelries, and the churches seem to have fallen into decay.

After the accession of James I there appears to have been a return of the people to the district, and in the reign of Queen Anne, Ancroft seems to have been in a flourishing condition, the population having risen to over a thousand. The inhabitants were employed mostly in shoe and clog making, in addition to their agricultural pursuits, and are said to have supplied the Royal Navy with the shoes or slippers worn by British sailors on board ship.

The mounds in the fields extending from the bridge at the foot of Bride's Brae to the Ancroft Town Farm cover the remains of cottages which were burnt down by order of the Government to stamp out a plague which had broken out. Huts provided for the people on the other side of the brae were known as "The Broomie Huts."

The income of the Priory of Holy Island was made over to the Dean and Chapter of Durham, who provided for the spiritual wants of the inhabitants of the chapelries by appointing two curates, one for Ancroft and Tweedmouth, and the other for Kylloe and Lowick. The title of Vicar was acquired by Act of Parliament passed at the instigation of Bishop Samuel Wilberforce, the first incumbent being Rev. W. Hewitt (1825-66).

The stained-glass window at the east end was put in to the memory of Mr Hewitt, who found the church in a very ruinous condition: the roof of the tower had fallen in and an elm tree, the top of which could be seen growing above the walls, had rooted itself amongst the débris. The work of restoration under

Mr Hewitt began in 1836, the tower being re-roofed, nearly the whole of the north wall of the nave removed and an aisle thrown out northwards. During the incumbency of Mr Henderson, afterwards Archdeacon of Northumberland, there was another restoration, and the church was closed from Easter to 28th October. It was re-opened on St Simon and St Jude's Day (28th October) when the sermon was preached by Dr C. Baring, Bishop of Durham and there were present the Right Honourable The Earl Grey, Lord Lieutenant of Northumberland, local clergy and a large congregation. There was further repair to the west wall of the tower in 1883, and the tower is again under repair at the present time.

The cost of restoration and of the new bell was borne by James H. Crossman, Esq., in memory of his father, Robert Crossman, Esq., of Chiswick.

The small bell in the tower came from John Wesley's chapel in London (known as "The Foundry").

A little to the west of the tower is the stone which marks the graves of the nuns who escaped from France during the Revolution, and lived in Haggerston Castle by the bounty of Sir Carnaby Haggerston, Bart.

The original font was carried away to Chillingham after the disturbed times of Oliver Cromwell, the present one having been given to the church by Archdeacon Charles Thorp, Warden of Durham University. It was formed out of a stone found at Finchale Abbey in the County of Durham. The panels were carved by an Italian sculptor employed at that time in Durham Cathedral.

The two chairs in the sanctuary are exact copies of a chair which belonged to Bishop Phillpots ("Henry of Exeter") and were made by Mr A. J. Smith, joiner, of Longdyke.

On the left as one enters the churchyard are some steps known as "The Louping-on Stane"—by which women riding behind the horseman mounted to their seats. It was usual to have a small pad or second saddle ("The Pillion") for the woman to ride on.

It may be interesting to recall that the stream which runs through the village into the Low passes along the old course of the river Till, and in the flood of 12th August 1948 was about twenty feet deep.

SOME ASPECTS OF THE COAST SOUTH OF BERWICK.

By R. COMMON, B.Sc.

IN this article the writer presents some of the more apposite results of field observations made locally between 1950 and 1952, and is concerned with the coastal plain between Spittal and Budle Point.

South from Spittal the coastline shows a variety of features, some of which in time will cause abandonment of nearby existing lines of communication, unless firmly checked *immediately*. Whilst Spittal is built on a low raised-beach fragment and fronted by sand, from the south end of the town to Saltpan rocks the seaward end of the Longridge has been eroded to form fifty to eighty feet cliffs and a rock shore. These cliffs, of Lower Carboniferous rocks, do not form a continuous feature, but are interspersed between broken rock piles and slumped faces, the whole standing above a wave-cut platform which continues alongshore towards Scremerston limeworks. The cliffs are unstable, for high seaward rock-dip ($30-50^\circ$) and the rhythmic bedding in the sediments are conducive to sliding of sandstones upon waterlogged shales under gravity. Besides wave action at the cliff base, rock jointing, local small faults and numbers of springs probably speed up the process of cliff recession. The wave-cut platform, produced by marine erosion, is best seen near the Doupster oil-shale outcrop,¹ but closer examination shows that the less resistant material has been picked out to emphasise the strike direction and to give the platform a serrated surface. On the more massive sandstone southward the shore is rougher with a tendency to potholing, whilst the limestones usually form carrs. Cliff recession has already closed a secondary road above Saltpan rocks and must already threaten the Edinburgh-Newcastle railway to the north.

Viewed from the cliffs south of Spittal the ground east of

¹ In this locality, too, there is an unconformity in the rock successions.

Berwick seems to have been water trimmed at fifty feet, and southwards, too, in the Scremerston limeworks area, a similar process seems to have occurred. Amongst the limestone workings variable amounts of reddish clay and blown sand upon bedrock are fronted by small skerrs and beach (the greatest thickness of glacial till seen by the writer being about nine feet). North from Goswick, first low multiple sand-dunes, then forty to fifty feet hillocks, back the beach, whilst the damp north-north-west to south-south-east swales inshore of these features suggest that the underlying clay lies close to the surface. Beyond Goswick Railway Station the reddish till is replaced by khaki-coloured alluvium lying as an extensive flat to Haggerston and Beal. Drab topographically and drained by artificial, occasionally interlaced water channels (Lows), this area is separated from the tidal Holy Island sand-flats by a narrow sliver of blown sand only ten to twenty feet high.

To the west the rising crest-level in a trough of relatively lower ground (Cheswick—Beal—Felkington—Norham) is accompanied by increasing definition of drumlin¹ features. On the seaward side the subdued topographic graining leads the observer to suggest that depositional drumlins or drumlin "tails" have subsequently been modified by erosion. Roodrumlin fronts look down on to the lower Tweed valley, and about their bases ill-drained boggy patches occur. The Allerdean stream seems at some period to have carried water that was formerly penned in the Thornton, Longridge and Murton bog areas and may have been connected with the Murton Dean overflow channel.² Southwards lies the Shoreswood ridge with a crest at about 260 feet but rising sporadically to 300 feet. Between Shoreswood and Duddo the drumlin topography continues, but south of the latter place it is the scarp front which has been ice-eroded. East of Duddo there are two small roches moutonnées, and then

¹ A drumlin is a land form resulting from glaciation, and examples occur plentifully in the Merse. They may be composed wholly or partially of glacial till, and possess a distinctive shape. The best analogy is to the half of a cigar cut lengthways laid flat side down. The long axis generally indicates the line of ice movement and they range in size from swells to low ridgelike hills.

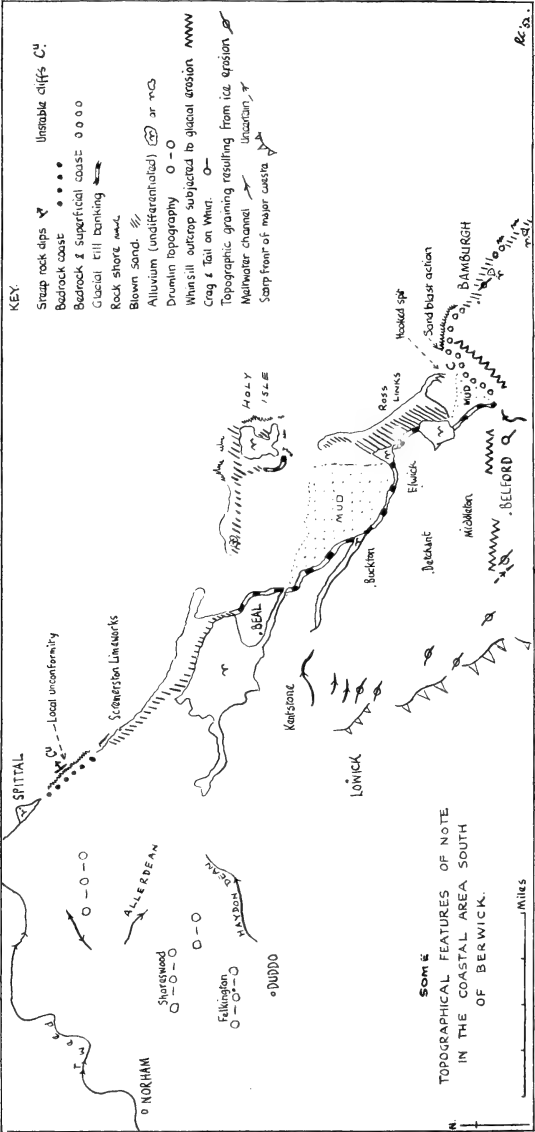
² The Murton Dean channel shows a two-way talweg, leading out on to bog at its south-east end, 150–125 feet, and a terrace to the north-east, at 175–150 feet.

the intake of the Haydon Dean melt-water channel, whilst to the south the ground rises quickly to distinctly higher terrain.

The writer considers that the trough of lower ground briefly described may have been the line used by a stream in preglacial times. It may have been the line formerly used by the Tweed, so that the present lower stretch of this stream could be of post-glacial origin. The minor streams now flowing over this trough are convergent on the Haggerston flats, and several can readily be seen to follow the rock strike, *e.g.* Drydean Burn, Lickar Burn.

The north end of the major cuesta is breached, and south-east of Kentstone Farm melt-water has used the gap to flow eastwards. The lower end of this channel (now used by the Dean Burn) hangs slightly above what may have been a later channel along the west side of Fenham Hill. Beal and Fenham Hills are both small, conical, ice-moulded hills, but both show alluvium-floored depressions along their western flanks. Speculating, the writer tentatively suggests that melt-water might, after using the Kentstone channel, have flowed obliquely across Haggerston area along the west margin of these hills.

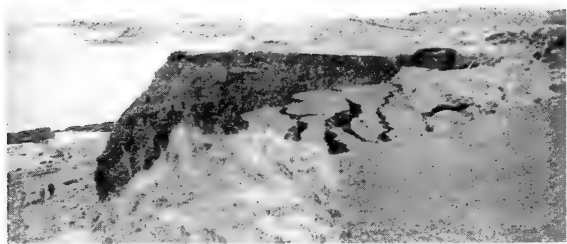
South from Beal Point a shingly shore is backed by a clayey banking of variable height (*e.g.* Whitelee lech, 20 feet; brown clay bank sloping seawards at 20–25°), whilst the Holy Island sand-flats change their character beyond the South Low to become mud-flats. Approaching Ross Links the clay is last seen at Cockly Knowes as it passes under blown sand, in a section showing ten feet blown sand overlying two feet grey clay, and to seaward, sand-flats reappear. The characteristics shown in the Goswick area are repeated by the blown sand on Ross Links, though on a larger scale. Ridges and hillocks stand highest to the north (between Jack's Waste and lookout hut Δ 34 feet), paralleling the shore and losing height and definition southwards. Inshore of these to the south, swales and swells appear, with the north-west to south-east water-logged Long Bog especially noteworthy. The inner margin of Ross Links is fairly well defined by two alluvial flats which flank the low continuation of Royalways swell, ending at Kirkley Hill, Ross. A hooked spit forms the northern margin of Budle Bay, and the sandy flats about it are replaced by mud of Chesterhill Slake across the Ross Low. The shore-line north-west of Waren Mill



SKETCH MAP SHOWING TOPOGRAPHICAL FEATURES OF NOTE IN COASTAL AREA SOUTH OF BERWICK.



NEAR RED SHIN COVE LOOKING NORTHWARDS: SPITTAL
JUST VISIBLE LEFT MIDDLE DISTANCE.



ABOVE SALTPAN ROCKS LOOKING SOUTHWARDS TO
SCREMERSTON LIMEWORKS.



MURTON DEAN MELT-WATER CHANNEL AT SOUTH-WEST
END LOOKING NORTH-EAST.



BUDLE POINT LOOKING NORTH AND SHOWING PART OF
THE HOOKED SPIT AT SOUTH END OF ROSS LINKS.



NORTH-WEST OF WARREN MILL ON INNER MARGIN OF
THE CHESTERHILL SLAKE.

is unusual, for the inner margin of the mud-flats shows pits of variable shape several yards in length, two to three feet in width and averaging a foot in depth. Examination of several such pits produced sections with a five-inch organic, rather sandy mud, underlain by a seven-inch brown clay. As for the low banking above high-water mark, the best section occurs where Ross Low enters the slake showing:

- 1 foot soil;
- 3 feet brown silt;
- 1 foot brown clay, with three thin, dark, rust-coloured "pan" layers;
- 2 feet grey clay.

Along the south shore of Budle Bay a narrow shingle band from Waren Mill to Kiln Point lies between mud-flat and a bedrock face which is capped by superficial deposits. At Kiln Point considerable numbers of boulders appear to have been buried beneath the blown sand—an old storm beach? Beyond Kiln Point the blown sand forms steep seaward faces, whilst on Black Rock the marginal sand-blasted edges contrast with the eroded joint pattern visible on the upper rock surface.

Inland, the 100 feet contour sweeping south-east from Fenwick Stead separates Buckton Moor and the higher ground associated with the Whin Sill from an area of gentle slopes and minor topographic features. Faulting and erosion have resulted in the Whin showing a triple echelon of crags aligned eastwards, and whilst the crags are south facing east of Belford, to the west they generally face south-west.¹ The three echelons are of variable width: the first occurs between Detchant and Middleton; the second, from Middleton to Belford, is pinched out at Chesterhill; and the third begins near Belford Station to run out to sea at Budle Point.

¹ The exceptions between Detchant Lodge-Belford Northbank and at Longhills, where a near crag and tail occurs, are due to severe ice erosion and form of outcrop.

SHADOW AND REFLECTION: WHICH IS WHICH?

By H. H. COWAN.

THE two words "shadow" and "reflection" are used continually in a very loose manner; indeed, many people use the one when they really mean the other, thus implying that they have little or no conception of what their eyes are really seeing. Many correct definitions are, of course, given in the dictionary to suit different circumstances, but without any illustration to guide us, some are not very illuminating. In the case of shadow, the "shade caused by an object" is as good a short definition as any, but in that of reflection it is rather less satisfactory as: "the change of direction when a ray of light, etc., strikes upon a surface and is thrown back." Perhaps a coined definition might be simpler, that "a shadow is the taking away of light: reflection is merely the repetition of light."

Take a sheet of white cardboard and hold it up so that it is between our eyes and the sun. The result is that the under-side of the board, which we know to be white, nevertheless appears to us to be relatively dark. Turn it gradually round and the under-surface of the card will slowly become lighter until, when our back is turned to the sun, the under-side will now be brilliantly white.

Now apply this reasoning to a boat with a white sail. When the sun is behind us and shining directly on to the sail, the sail naturally appears to be brilliantly white. If, however, the boat passes between us and the sun, the sail will appear to become gradually much darker. When water is present in a picture, somewhat similar appearances result, but in the reverse order. If the sun is behind us and we look across water, that water appears to be dark blue or green according to circumstances. If, however, we are looking towards the sun, the water acts as a mirror and sends back to our eyes a considerable portion of the sunlight which falls upon its surface and thereby appears bright.

If we combine these two circumstances, we have in the first



SWAN CASTING DARK REFLECTION.

[To face p. 180.]



SWAN CASTING WHITE REFLECTION.

case, *i.e.* when the sun is behind us, a brilliantly white sail seen against the dark water, while in the second case the sail will appear relatively dark against the bright water. The numerous pictures of yacht-racing give proof of this. If the surface of the water is smooth, then in the first case we see the white sail reflected in the dark water as a comparatively white image. This is a *reflection*. In the second case, we shall see the sail appearing in the water as a relatively dark image. This, while still being a reflection, is also a *shadow*, as it really represents a cutting-out of light.

Why is it that, as shown in the photographs, a *white swan swimming in a pool should have beneath it sometimes a white reflection of itself and sometimes a dark reflection*? If we apply the reasoning given above to the case in point, we shall be better able to understand, though the matter is not by any means so straightforward as in the case of the reflection of the sail. For the swan is not a flat plane as is the sail, but a solid object possessed of rounded and finely modelled surfaces. In one photograph the light is coming almost at right angles to the direction in which we are looking, and therefore from about the right-hand top corner of the picture. It falls strongly upon the back and farther side of the swan, and reflected light reaches the near side of the bird in quantity sufficient to make it also appear relatively white. But if our eyes were at the level of the water surface near the swan, we should see the swan black against the light, just as we did the piece of white cardboard, and this dark image is really the one that is reflected back from the water surface to our eyes in the picture. It thus appears as a *shadow* reflection. Had the sun been behind us, the reflection of the swan, instead of being dark as in Plate XXIV, would have been white; certainly not so bright a white as the bird itself, but distinctly brighter than the surface of the water. This *white reflection* is shown in Plate XXV, though it would be only fair to remark that in this photograph the matter is complicated by the presence of a dark shadow reflection of the wall on the other side of the pond.

It is, in fact, always a matter of relative tones. Yet this attempt at explanation may serve to enlighten those who may have wondered about the occurrence of the phenomenon of a *white* object casting, as it were, a *black* reflection.

ORNITHOLOGICAL AND OTHER NOTES.

By Lieutenant-Colonel W. M. LOGAN HOME.

1. ORNITHOLOGY.

THE outstanding event of the year was the appearance of a roller (*Coracias garrulus*) near Westruther. On 17th July Mr W. Cairns, Spottiswoode, was informed that there was a strange, brilliant blue bird on Raecleugh Farm. This proved to be a roller in splendid plumage. The bird remained in the neighbourhood till 23rd July, and was seen and studied by ornithologists from the Borders and Edinburgh. It appeared to be feeding on grasshoppers, craneflies and other insects, which it picked off the grass. Its favourite perches were the posts bordering a newly cut hayfield, and the poles of the telephone line to Raecleugh Farm. As the roller flew about the fields it presented a gorgeous spectacle, the brilliant light and dark blue, green and purple contrasting with the bright chestnut of the back. This is the first recorded occurrence of the bird in Berwickshire.

As regards other species, a ♀ blackcap came to the bird-table of Mr Cowieson, Clockmill, during January and stayed about there for two weeks. The pied flycatcher nested in a number of places throughout the county. Several pairs were found nesting in natural holes in alders in a wood near Duns and others near Abbey St Bathans. Two pairs of green woodpeckers successfully reared broods in Berwickshire, the first known records. Wood-warblers and tree pipits were also located nesting in the same wood as the pied flycatchers.

A pair of grey wagtails had two broods in a nest placed on a window-sill at Manderston, while another pair shared a small shed near Gavinton with a pair of pied wagtails. A quail was heard calling in a barley-field near Preston on 24th June.

In September a ♀ Greenland wheatear was picked up dead in

Mr H. H. Cowan's garden. In this month also a white swallow was seen at Swinton. On two occasions, in June and July, juvenile goldcrests were found flying about inside rooms at Edrom House. If any other members have heard of similar cases, will they please communicate with the Natural History Editor?

On 4th December two great grey shrikes were reported from near Chillingham by Miss Pape. A corncrake was heard at High Cocklaw by Mr T. McGregor Tait.

2. ENTOMOLOGY.

THE following uncommon moths were taken during the year by Mr A. G. Long, Gavinton. Several species have not been recorded previously from Berwickshire.

R. = Rare. L. = Local. G. = Gavinton.

Species.	Occurrence.	Place.
Lunar marbled brown (<i>D. ruficornis</i>)	1st record. R.	Lamps at Gavinton
Great swallow prominent (<i>P. tremula</i>)	1st record. L.	
Nut tree tussock (<i>C. coryli</i>)	L.	G.
Pebble hook-tip (<i>D. falcataria</i>)	L.	G. and Cuddy Wood
Peach blossom (<i>Th. batis</i>)	L.	G.
Pale prominent (<i>P. palpina</i>)	L.	Larva at Oxendean
Sallow kitten (<i>C. furcula</i>)	L.	Larva at Kyles
Green silver lines (<i>B. prasinana</i>)	L.	Larva at Elba
Pine beauty (<i>P. flammea</i>)	L.	Kyles Hill
Red chestnut (<i>C. rubricosa</i>)	L.	Polwarth
Small quaker (<i>O. cruda</i>)	L.	Kyles
Double square spot (<i>A. triangulum</i>)	L.	G.
Flame rustic (<i>A. putris</i>)	1st record. R.	G.
Feathered gothic (<i>T. popularis</i>)	1st record. L.	G.
Green arches (<i>A. prasina</i>)	R.	G.
Large wainscot (<i>P. lutosa</i>)	2nd record. R.	{ Duns by Mr G. Graham
Gold spot (<i>P. festucae</i>)	L.	
Gold spangle (<i>P. bractea</i>)	R.	G.
Grey rustic (<i>A. castanea</i>)	L.	Greenlaw Moor
Centre-barred swallow (<i>A. xerampelina</i>)	L.	G.
Orange sallow (<i>T. citrigo</i>)	1st record. R.	Langton
Marveille du jour (<i>G. aprilina</i>)	L.	G.
Lunar thorn (<i>S. lunaria</i>)	L.	G.
Brown silver lines (<i>C. cholorsata</i>)	1st record.	G. and Cuddy Wood
Small argent and sable (<i>E. tristata</i>)	L.	Langton
Welsh wave (<i>V. cambrica</i>)	L.	Cuddy Wood
Fanfoot (<i>Z. tarsipennalis</i>)	R.	G.
Small fanfoot (<i>Z. nemoralis</i>)	1st record. R.	G.
Phoenix (<i>C. prunata</i>)	L.	G.
Dotted carpet (<i>C. jubata</i>)	1st record. R.	Cuddy Wood
Blue bordered carpet (<i>P. bicolorata</i>)	L.	Cuddy Wood
Pine carpet (<i>T. firmata</i>)	L.	{ Cuddy Wood
Canary shouldered thorn (<i>D. alinaria</i>)	L.	
Red-green carpet (<i>C. siterata</i>)	L.	G.
Large emerald (<i>H. papilionaria</i>)	L.	G.

REPORT ON MEETING OF THE BRITISH ASSOCIATION AT BELFAST, 1952.

By Mrs M. H. McWHIR.

THE one hundred and fourteenth meeting of the British Association took place at Belfast from 3rd to 10th September. The inaugural meeting was held in the beautiful Sir William Whitla Hall, and it was my privilege to be present on that most memorable occasion. As the honorary graduates filed on to the platform to receive their degrees from the Chancellor of Queen's University, Field-Marshal Viscount Alanbrooke, their colourful robes lent a splendour to the scene. The Right Honourable the Lord Mayor of Belfast, James Henry Norrit, J.P., welcomed the Association to the City. Then the Vice-Chancellor, on behalf of the University, welcomed the members.

After this, the President for 1952, Professor Vivian Hill, gave a very able and thought-inspiring address, the title of which was "The Ethical Dilemma of Science."

In the course of it Professor Hill said: "Let us be realists so long as offensive weapons may be used. The part played by the scientist is no more immoral than that of the engineer, the workman, the soldier or the statesman. We, as citizens, all bear an equal responsibility." He went on to remark that the first condition of freedom is freedom of conscience, and that the scientist has the same right to that as any other citizen. Professor Hill indicated that he based his address on the concluding words of the Duke of Edinburgh's Presidential Address last year: "It is clearly our duty as citizens to see that science is used for the benefit of mankind." The fundamental principle which ran through the whole of his address was an unbending integrity of thought following the evidence of fact wherever it might lead. On that there could be no compromise. Goodwill and integrity were alike indispensable to scientific progress.

The speaker went on to emphasise that it was not a question only of food if a higher standard of life was to become universal, but also of education, housing and public health. A far greater

demand would be made on all such natural resources as power, chemicals, minerals, metals, water and wood. The great question was, could world supplies conceivably hold out? Every possible endeavour should be made towards international agreement. Peace itself was the serious concern of every citizen, not only of scientific people. Next Professor Hill cautioned scientists not to use the prestige of science to attract attention for other subjects; for example, politics or religion. This would be a disservice both to science and the public.

Previously he had prefaced his remarks by recalling the first meeting of the Association in Belfast exactly one hundred years ago, and went on to say how happy they were to be celebrating a century of the progress of British science in which Ulster people had played a long and honourable part. He mentioned Hans Sloane of Killyleigh, botanist, physician, and President of the Royal Society, on whose bequest to the nation the British Museum in London was founded. Indeed, he went on to say, there were many Irishmen from the other side of the Border, and they were doubly welcome, for science knew no frontiers, and no customs duty was levied on ideas or friendship.

The Professor remarked also in the course of his address that it might be well in a reformed Second Chamber to provide the same representation for Science as is at present afforded to Church and Law.

His Royal Highness the Duke of Edinburgh, Past President of the British Association, then read a message from Her Majesty the Queen. Before proposing a vote of thanks to Professor Hill, he said that he had a message from the Queen: "I am very glad to send, through my husband, this message of good wishes to the members of the British Association for the Advancement of Science. I well know that the strength of our country and commonwealth depends more and more on the skilful application of scientific discoveries to the many problems that beset us to-day. With this in mind, I am happy to extend my patronage to the British Association, whose meetings afford scientists, old and young, such inestimable opportunities of freely exchanging their knowledge and ideas."

When the applause had died down, His Royal Highness went on: "It seems to have been the general custom in the past for scientists in their Presidential addresses to deal with some

aspects of the work of scientists. Therefore he had expected to hear more about science from Professor Hill, especially as he was the recipient of the famous Nobel Prize, thirty years ago, for his work on 'Muscular Action.'" "But," he went on, "Professor Hill has told us most ably and fearlessly what responsibilities scientists have in connection with present-day problems. He has stated these problems clearly and courageously, and has demonstrated that integrity which is the hallmark of all great scientists." Continuing, the Duke of Edinburgh said that the Annual Conference of the British Association had long served a twofold purpose in providing a meeting-place for scientists to discuss their work as well as an opportunity to let the layman know the progress of science. Turning again to the Inaugural Address, he went on: "I am sure your address this evening will be welcomed by scientists throughout the world as sound common sense and wise counsel. You have told us about the strict principles governing scientific thought without which no progress of any value can be achieved. I believe that in exactly the same way Christian principles should govern the thoughts and actions of the community at large. In fact, the compelling duty of the good citizen is to apply those principles to all the problems of modern life, whether they be personal, social, political or scientific. We have been privileged to-night to hear an address which I have no doubt will go down in the annals of the British Association as one of the most important pronouncements made from the chair in recent times." The Duke ended his speech on a lighter note: "You began, sir, by telling us a little about our previous meeting in Belfast. Let me anticipate the next occasion when the Association will again enjoy the hospitality of this famous city. I trust there will be an ex-President, with perhaps whiter hair, and in the full possession of all his faculties, still speaking with that clear voice of wisdom that we have all enjoyed so much to-night." The Duke sat down to the accompaniment of laughter and loud applause.

During the course of the week I tried my best to attend as many lectures as possible, but I found it quite beyond my powers to be in two places at once. The lectures in the various sections were numerous and in most cases most interesting and instructive.

The history of afforestation in Northern Ireland proved to be of particular interest. It was given by Mr J. Pinolitt, O.B.E., and it set out to prove that Ulster would soon be very well wooded. This was demonstrated to me in a practical way on some of the excursions, the bus passing great stretches of newly-planted trees.

Mr G. B. Adams read a paper on the history and work of the Belfast Naturalists' Club, in the course of which he said that the Club was founded in 1863 with a membership of sixty, and prospered so much that by the second meeting of the British Association which took place in Belfast in 1874 it had increased its membership fourfold. Since 1923 several clubs had been affiliated to the Belfast Club.

The Prime Minister of Northern Ireland and former Minister of Agriculture told a representative gathering of scientists that British farmers were called on to play an important part in the life of their country. Agriculture, said Lord Brookeborough, was the foundation on which the United Kingdom must build her economic recovery.

Mr R. Bromwell, O.B.E., Permanent Secretary to Northern Ireland and Minister of Education, mentioned in a lecture under the Educational Section that since the 1947 Education Act came into operation there had been no complaint from any quarter about the teaching of religion in the county schools. He also said in the course of his talk that Northern Ireland was quite three years behind Great Britain in starting the new system.

Amongst many subjects covered by the various sections were adulteration of food, chemistry's rôle in the employment of nuclear power for the benefit of humanity, and the assessment of personality. Most of these lectures were crowded and in some cases we found it quite impossible to get in.

Another outstanding feature of the meetings was the attention given to adolescent interests and the extent to which these facilities were taken advantage of. The excellence of the arrangements generally, called forth glowing tributes from all.

The trouble taken by the authorities to give visiting members every opportunity to see as much of the beauties of Northern Ireland as possible was beyond praise. I am sure that each of us will carry away happy memories of the hospitality of the Ulster folk. My hostess was a shining example. The overseas

members were no less satisfied with their treatment at the hands of this most kindly and hospitable city; a community which, after a long interval, has once again filled the rôle of host and has, moreover, demonstrated its intense interest in supplying a local membership by common consent unequalled outside London.

The Belfast meeting has been a notable one, productive of all the British Association stands for and exists to provide; in particular, a platform where eminent men can pool their ideas and report progress to the lay world, so that we may see, however dimly, the shape of things to come. The value of all this for the strength of our country and commonwealth can hardly be exaggerated. As Her Majesty the Queen remarked in the course of her message to the Association, our strength depends more and more on the skilful application of science to the many problems that beset us to-day.

Many of the members made excursions to the Ards peninsula and the beautiful cathedral towns of Armagh and Downpatrick. There were also many industrial establishments open to members of the Association: trips were run to Ballylumford Power Station and the Agricultural Research Institute at Hillsborough. Many visited also the Mourne Mountains, Derry City, the Giant's Causeway and Dublin. An afternoon motor run to Buncrana and through some of the moorland roads of Donegal was very interesting. It seemed strange on the way back into Ulster, over the frontier, to be stopped and inspected by Customs officers. Some of us were presented, during our week in Belfast, with anti-partition leaflets.

A visit to Derry in one of the new Diesel trains proved most enjoyable and the day was perfect. Mr McMillan, Editor of the *Londonderry Sentinel*, was an ideal guide on our journey round the historic walls of the city. He made its stirring past live again for us. To the majority of Ulster folk Derry is a kind of Holy City. Mr McMillan's book on its *Ancient Defences* establish him as an authority on the subject.

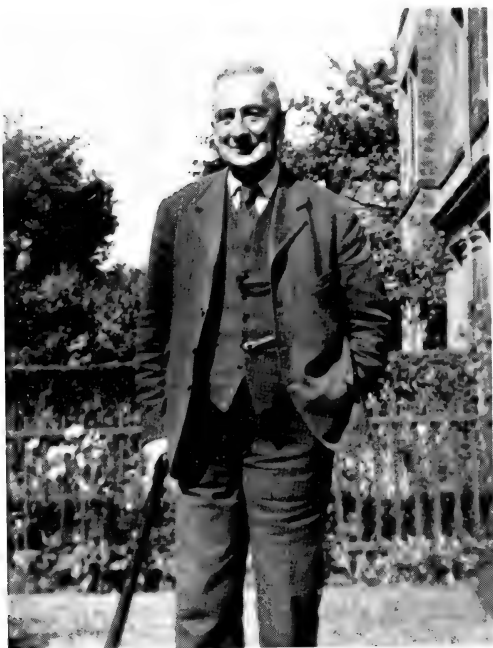
At a conference in Queen's University Professor Hill announced the formation of a committee which will study the application of science to industry. This, he said, was as much a part of the advancement of science as doing original research work, and it was most appropriate that the British Association

should take a great interest in this most vital question. Mr G. Bennet, General Treasurer, said there was a widespread feeling that some of the effort put into research should also be applied to the problems of industry. He added that, if fuel efficiency could be increased by just a few per cent., ten million tons of coal per annum could be saved and made available for export.

Professor Hill then read the following resolutions: "At the close of one of the most outstanding meetings in the long history of the Association, the General Committee, on behalf of all its members, resolve to place on record their deep appreciation of the warmth of the welcome offered to the Association by the people of Northern Ireland. The General Committee also wish to convey their sincere thanks to the Prime Minister, to the Minister of Education, to the Lord Mayor of Belfast, to the Chancellor of Queen's University and to all other hosts and colleagues for their exceptional generosity and kindness."

Latest membership figures show 4643, of whom 2737 were from Northern Ireland. That was easily a record, said Professor Hill, and added that the outstanding feature and hope for the future was that a fifth of the total were under twenty years of age and that two of the most intelligent members he had met were only fifteen.

It only remains for me to thank the other members of Council for doing me the honour of sending me as their delegate to Belfast—an experience I shall never forget.



JOHN BISHOP DUNCAN, EX-LIBRARIAN,
DECEMBER 1950.

[To face p. 191.

OBITUARY NOTICES.

SINCE the New Year the Club has lost three of its older members, outstanding in varying types of accomplishment and public service, and each endowed with a very definite character and personality.

JOHN BISHOP DUNCAN.

Mr Duncan, a native of Edinburgh, spent much of his early life at Moffat, where his father was Rector of the local Academy. It was there that he acquired the great love of Nature and the countryside that was later to make him a specialist in a rather unusual field. He completed his banking apprenticeship at Moffat, and after assignments at Kelso, Stratford-on-Avon and Birmingham, came to Berwick on retirement from the service of the Midland Bank in 1923. There he immediately joined the Club and became its Librarian in the following year, demitting office in favour of Mr Parker towards the end of the Second World War. Owing to failing health, he retired from membership in 1947.

Volumes xxv, xxvi and xxvii of the *History* contain, under the title "Mosses and Hepatics of Berwickshire and North Northumberland," five lists of species and varieties which were at that time new vice-county records. There followed, in 1946, his "List of the Bryophytes of Berwickshire" (*Transactions and Proceedings of the Botanical Society of Edinburgh*, vol. xxxiv, part iii) which supersedes a paper by Dr Hardy on the subject appearing in the *History* as far back as 1868; and, in 1951, "A List of the Bryophytes of Northumberland" (*Transactions of the Natural History Society of Northumberland, Durham and Newcastle-on-Tyne*, vol. x, part i), which took him fifteen years to compile, and which similarly replaces and summarises the work of earlier experts. Mr Duncan presented his collection of bryophytes to the Hancock Museum at Newcastle.

In pursuit of his absorbing interest he travelled widely in Europe and the British Isles, and was, in succession, Treasurer, Vice-President and President (1935-38) of the British Bryological Society. He held the position of Referee to the Society until comparatively lately. A merely factual recital of his achievements gives only a slight impression of his industry and enthusiasm in a science which must bring its own particular thrill of discovery. The writer had occasion to consult him recently on the controversial subject of "Blewits" (*History*, vol. xxxii, part ii, p. 129) and received a courteous and immediate reply. Outside his "profession", Mr Duncan, a cousin of the late John Bishop, was, in his day, a keen fisherman and gardener, and to the end of his life retained an interest in good music.

CAPTAIN JOHN CARNABY COLLINGWOOD.

THE "Squire" of Cornhill, Captain Collingwood, a descendant of the great Admiral, was something of an institution. After Oxford and a period of service in the Army, he returned to his birthplace and never left it again. As magistrate and councillor, each for over half a century, chairman of innumerable committees and all-round sportsman, his interests were widespread and genuine; no good cause, especially the welfare of old people and children, fell outside his province. In 1949 he became Chairman of the historic Berwick Salmon Club, which holds its annual dinner at the spring-time "blessing of the nets." He was the fourth senior member of the Club (1902) at the time of his death—like Mr Duncan, in his eighty-fourth year—and regularly attended its Annual General Meeting at Berwick, if not, latterly, its more strenuous long-distance excursions. But it was his natural charm, his old-time courtesy of manner, his accessibility, his capacity as a raconteur on congenial unofficial occasions, that endeared him particularly to his many friends. The Club will miss the well-groomed, youthful presence, dark carnation in button-hole, the quiet, tactful enquiry, in all its future deliberations.

THOMAS MCGREGOR TAIT.

No man is happy without a hobby, especially after his retirement, and Mr Tait was fortunate in possessing two, ornithology and poetry, which are not mutually exclusive. In his collections of verse, *Ivy and other Poems* and *Silvia*, their reviewer in the *History* indicated a preference for the simpler lyrics on birds and flowers, the obvious products of first-hand observation, over more formal and ambitious themes, such as the death of John Bishop. As an ornithologist—he was local Secretary, before his retirement, of the Royal Society for the Protection of Birds—he displayed an infectious enthusiasm rather than a complete reliability. There was, in fact, in his general behaviour, an eager insistence, an informality of method, as in his extremely practical method of advertising his books, or in the suggestion that he made, at the last Business Meeting, that any future field expedition to Cheviot should occupy a week rather than a single day. But of his zeal for his native town and for the well-being of the Club, there could never be the slightest question.

RAINFALL IN BERWICKSHIRE DURING 1952.

Compiled by the Rev. A. E. SWINTON of Swinton, M.A., F.R.Met.S.

Station.	Height above sea-level.	Station.	Hours.	Dura- tion.
		Swinton House.		
		The Roan, Lauder.	550'	28.5 17.9 21.0 17.0 24.4 37.2 24.8 31.5 38.9 45.4 63.6 60.9
		Cowdenknowes.	300'	2.54 2.30 2.30 1.22 1.31 1.81 2.07 1.68 3.48 2.06 3.28 3.55 4.79
		Marchmont.	498'	1.86 1.86 1.19 1.58 1.41 2.02 2.65 1.42 3.54 2.43 3.47 3.52 4.28
		Lochton.	150'	1.53 1.53 1.55 1.88 1.14 1.46 2.00 1.61 4.48 2.10 2.75 3.66 3.84
		Swinton House.	200'	1.54 1.54 1.27 1.32 1.93 1.93 1.25 3.50 2.21 2.70 3.59 3.91
		Nisbet House.	200'	1.98 1.98 1.59 1.70 1.62 2.14 2.68 1.38 2.13 3.08 2.94 ..
		Manderston.	356'	1.80 1.80 1.61 1.54 1.65 2.50 2.32 1.34 3.13 2.44 2.88 3.61 4.10
		Duns Castle.	500'	1.83 1.83 1.58 1.55 1.90 2.05 2.96 1.99 3.17 2.79 3.81 3.78 4.14
		Whitchester.	838'	2.03 2.03 1.56 1.59 1.97 2.38 2.76 1.26 4.06 3.21 4.32 4.24 4.98
		Tweedhill.	50'	1.54 1.54 1.99 1.36 1.52 2.30 2.00 1.23 2.90 2.27 2.58 3.30 3.73
		St Abb's Head.	280'
		Month.		
		January		28.5
		February		17.9
		March		21.0
		April		17.0
		May		24.4
		June		37.2
		July		24.8
		August		31.5
		September		38.9
		October		45.4
		November		63.6
		December		60.9
		Year		411.1

TREASURERS' FINANCIAL STATEMENT FOR YEAR ENDING 20th SEPTEMBER 1952.

RECEIPTS.

Credit Balance at 20th September 1951.	£303 3 11
<i>Subscriptions—</i>	
Annual	£310 0 0
Entrance Fees	28 10 0
Arrears Paid	15 0 0
Commissions on Cheques	0 2 0
Donations	353 12 0
<i>Sale of Club Badges</i>	0 0 0
Received from Librarian for sale of <i>Histories</i>	9 0 0
	4 19 10

PAYMENTS.

<i>History for 1950</i>	£226 18 0
<i>Printing and Stationery—</i>	
Neill & Co. Ltd.	£58 6 4
Martin Ltd.	6 6 9
<i>Miscellaneous Expenses—</i>	
Cheque Book	£0 4 0
King's Arms Hotel, Berwick, Hire of Room for Meeting	2 2 0
Embroidering Two Club Flags	4 4 0
Borough Treasurer, Berwick, Rent of Library	2 0 0
Dunn & Wilson, Falkirk, Re-binding of <i>Histories</i>	5 10 3
<i>Subscriptions—</i>	
Scottish Regional Group, Council of British Archaeology	£1 18 9
Chillingham Wild Cattle Association	1 1 0
Royal Society for the Protection of Birds	1 1 0

Officials' Expenses—

Secretary (H. H. C.)	£30 2 10
Editing Secretary (A. A. B.)	3 19 6
Treasurers (T. P. and H. F. M. C.)	9 17 2
Delegate to British Association	9 2 0

Credit Balance at Bank 20th September 1952

£670 15 9

APPROXIMATE BALANCE SHEET.

LIABILITIES.

Estimated Account for printing 1951 <i>History</i>	£240 10 7
Credit Balances: General Account	£67 11 7
Investment Account	158 5 2
	225 16 9
	£466 7 4

ASSETS.

Cash in Bank: on General Account	£308 2 2
on Investment Account	158 5 2
	£466 7 4
	£466 7 4

27th September 1952.—I have examined the above Financial Statement with the books and receipted accounts, and find it correct. The Bank (Signed) P. G. GEGGIE.

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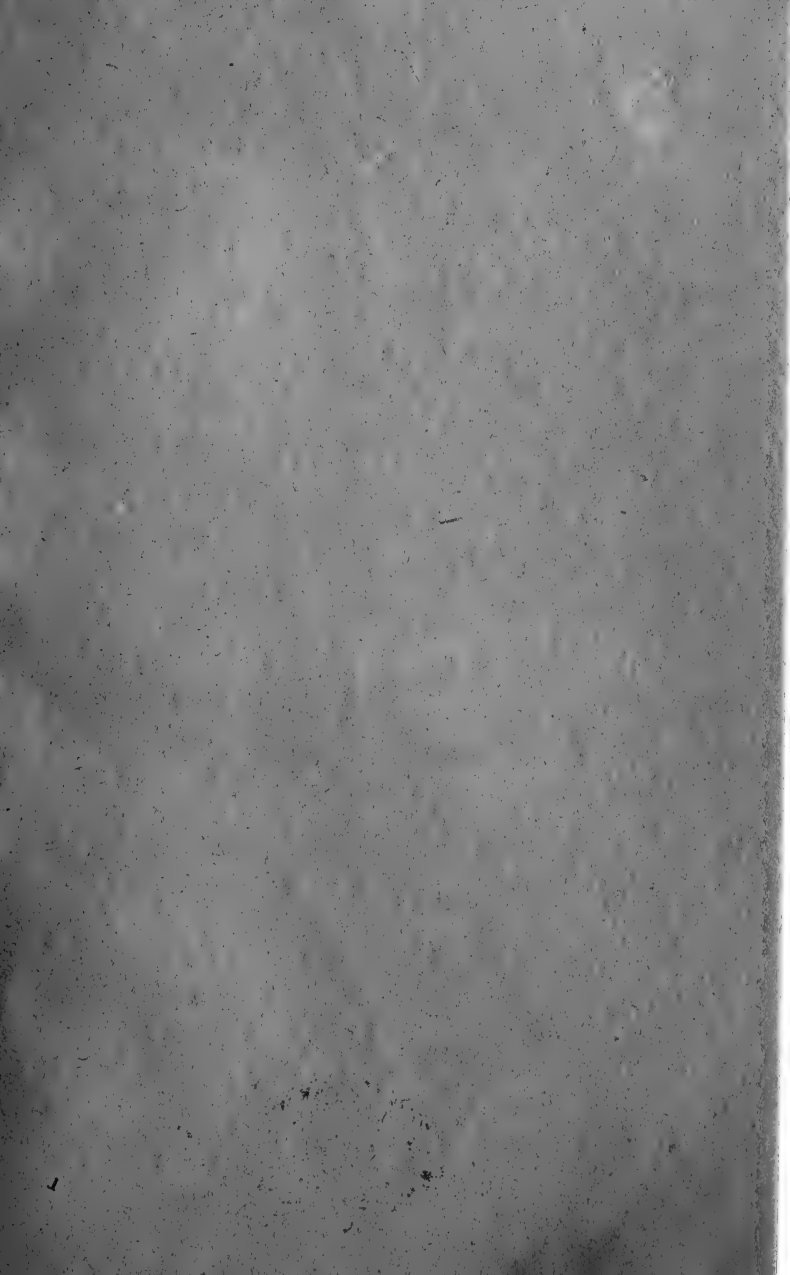
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